



AWQ-LGD

85-SDP-13-91

November 30, 2004

Con 12-1-1
Doc # 33000

Ms. Nina Koger, Lead Engineer
Energy & Waste Management Bureau
Iowa Department of Natural Resources
502 East 9th Street
Des Moines, Iowa 50319

RE: 2004 Annual Groundwater Quality Report
Ames-Story Environmental Landfill
85-SDP-13-91P
P.N. 6004.320

Ms. Koger:

Find attached 1 copy of the 2004 Annual Groundwater Quality Report for the Ames-Story Environmental Landfill.

A copy of this data has been forwarded to Mr. William Fedeler, Ames-Story Environmental Landfill and IDNR Field Office #5 as required by the Permit.

Sincerely,
FOX ENGINEERING ASSOCIATES, INC.

Todd Whipple, CPG
Project Manager

Water | Wastewater | Solid Waste | Air | Land

2004 ANNUAL GROUNDWATER QUALITY REPORT
OF
THE AMES-STORY ENVIRONMENTAL LANDFILL
85-SDP-13-91P
AMES, IOWA

by:
FOX Engineering Associates, Inc.
1601 Golden Aspen Drive, Suite 103
Ames, Iowa 50010
(515) 233-0000

NOVEMBER, 2004



6004-99A.322

Annual Groundwater Quality Report

November 29, 2004

Ms. Nina Koger, Lead Engineer
IDNR – Energy & Waste Management Bureau
Wallace State Office Building
502 East 9th Street
Des Moines, Iowa 50319

**RE: AMES/STORY ENVIRONMENTAL LANDFILL
ANNUAL GROUNDWATER QUALITY REPORT
IDNR #85-SDP-13-91P
FOX PN 6004.320**

Dear Ms. Koger:

This Annual Report has been prepared in accordance with IAC 567-113.26(8)d. The semiannual inspection reports have been submitted to IDNR in accordance with the General Provisions of the Permit. The following information and comments are presented in accordance with the IAC section referenced above.

1. ENVIRONMENTAL EFFECTS

a. Groundwater

The Hydrologic Monitoring System Plan (HMSP) for the site is approved by Special Provision X.7 of the current SDP Permit, dated November 24, 2003 (Attachment A). Conditions in the Permit require semi-annual and annual sampling to be performed at designated monitoring wells at the site. Trenches 1 through 4 are located in the north portion of the site and were filled between 1991 and 1999. It follows that all first year quarterly sampling episodes have been completed for the Trench 1 through 4 fill area.

Trenches 5 & 6 are located in the south portion of the site. Trench 5 construction was completed and approved for waste acceptance June 16, 1999. Trench 6 construction was completed and approved for waste acceptance May 26, 2000 (Permit Amendment #1). First year quarterly water sampling in Trench 5 & 6 was completed in March, 2001.

The site (both the north and south fill areas) is characterized as having two (2) groundwater systems that are monitored as part of the HMSP; the Water Table system and the Upper Aquifer sand layer system. MW-36 and MW-37 are the upgradient monitoring points for the Upper Aquifer System and the Water Table System, respectively.

Annual Groundwater Quality Report

Chemical analytical results for 2004 and Summary Tables are included in Attachment B. The chemical analytical data is also presented graphically by chemical compound over time in Attachments C, D, and E. The statistical computations are included in the tables in Attachments C, D, and E. Graphs of the concentration versus time for the sampling points illustrate those compounds that exceed statistical limits. Review of the graphs and data indicate the following observations.

Water Table System - Test results from upgradient MW-37 (Attachment C) indicate detectable concentrations of arsenic, barium, COD, chloride, iron (exceeding the Secondary MCL), magnesium, nitrogen ammonia, TOX, and zinc. The presence of the noted compounds in the upgradient well may indicate that the compounds are migrating onto the site from an off-site source(s), or are endemic to the region.

Downgradient MW's indicate detection of compounds at concentrations that do not exceed primary MCL's. The compounds that exceed statistical limits are summarized by monitoring well below:

MW-6	Barium, COD, chloride, and TOX
MW-28	COD, chloride, magnesium (3/92), and TOX
MW-23	Barium, chloride, lead (10/91), and TOX
MW-24	Barium, COD (9/92), chloride, lead (4/91), and TOX (9/93)
MW-31	Barium, COD, chloride, lead (10/91), and TOX
MW-25	Barium, COD, chloride, lead (10/91), and TOX
MW-33	Barium, COD, chloride, iron, ammonia, and TOX
MW-34	Barium, COD, chloride, lead (10/91), ammonia (3/96), and TOX
MW-35	Barium, COD (9/04), chloride, and TOX
MW-39	Arsenic (12/00), barium, chloride, and TOX
MW-40	Barium, chloride and TOX (9/02)
MW-43	Barium, COD, chloride, ammonia, and TOX

Indicator compounds such as chlorides, COD, and TOX have been found to exceed statistical control limits in a number of the downgradient MW's. In addition, barium, iron, magnesium, and nitrogen ammonia have also been detected in several downgradient wells. However, due to the presence of detectable concentrations of these compounds in the upgradient wells, these results have not been interpreted as a release of leachate into the groundwater. The lead concentrations detected in 1991 appear to be anomalous.

Upper Aquifer System - Test results from upgradient MW-36 (Attachment D) indicate detectable concentrations of arsenic, barium, COD, chloride, iron (in excess of secondary MCL's), magnesium, nitrogen ammonia, TOX, and zinc. The presence of the noted compounds in the upgradient well may indicate that the compounds are migrating onto the site from an off-site source(s), or are endemic to the region.

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Downgradient MW's indicate detection of compounds at concentrations that exceed the primary MCL for arsenic at MW-8, MW-30, MW-38, MW-41, and MW-42. The secondary MCL for iron was exceeded at most wells for various sampling episodes. The secondary MCL for chloride was exceeded at MW-33 in March, 2003. The compounds that exceed statistical limits are summarized by monitoring well below:

MW-7	arsenic (12/00 & 3/01), barium, iron (3/03), and TOX (9/00 & 9/04)
MW-8	arsenic, barium, chloride (3/04), iron, ammonia (9/01 & 3/04), TOX, and zinc (3/01)
MW-29	arsenic, barium, COD (prior to 3/95), lead (10/91), iron (10/91), TOX, and zinc (3/01 & 3/02).
MW-30	arsenic (10/91), barium (4/91), COD (prior to 3/95), chloride (3/96), lead (10/91), and TOX
MW-32	COD, chloride (1/92), iron, magnesium, lead (4/91 & 10/91), and TOX
MW-25	COD, chloride, lead (10/91), magnesium, and TOX
MW-33	COD, chloride, iron, magnesium, nitrogen ammonia, and TOX
MW-34	COD, chloride, iron, lead (10/91), magnesium, nitrogen ammonia, and TOX
MW-35	COD, chloride, iron (9/97), magnesium, and TOX
MW-38	arsenic, barium, COD (9/04), chloride, and TOX (9/04)
MW-41	arsenic, barium, iron, and zinc (12/00)
MW-42	arsenic, barium, COD (9/04), chloride (9/01), iron, lead (6/00), and TOX

Indicator compounds such as chlorides, COD, conductivity, and TOX have been found to exceed statistical control limits in a number of the downgradient MW's. In addition, arsenic, barium, iron, magnesium, and nitrogen ammonia have also been detected in excess of statistical control limits in several downgradient wells. However, due to the presence of detectable concentrations in the upgradient wells, these results have not been interpreted as a release of leachate into the groundwater. The detected lead concentrations appear to be anomalous.

Surface Water - Test results from upgradient SMP-1 indicate detectable concentrations of barium, COD, chloride, iron (in excess of the secondary MCL), lead, magnesium, and TOX. The presence of the noted compounds at the upgradient monitoring point may indicate that the compounds are endemic to the stream.

Downgradient Surface Water sampling points indicate detection of compounds at concentrations that exceed the primary MCL for arsenic at SMP-4 and SMP-6. The secondary MCL for iron is commonly exceeded at SMP-6. The compounds that exceed statistical limits are summarized by monitoring well below:

SMP-2	COD (3/03), chloride (3/03) and lead (10/91)
SMP-3	barium (10/91), magnesium

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SMP-4	arsenic, barium, COD, copper (9/02), magnesium, ammonia, and zinc (6/00 & 3/01)
SMP-5	barium (9/02), and ammonia (3/03 & 3/04)
SMP-6	arsenic, barium, iron, magnesium, and ammonia (9/02 & 3/04)

2. STATISTICAL COMPUTATIONS

Statistical computations are summarized on the spreadsheets/graphs in Attachments C, D, and E. It appears there is significant variation in background levels of certain measured constituents in upgradient groundwater and aquifer monitoring wells. The presence of the noted compounds in the upgradient well may indicate migration (run-on) of several compounds from an off-site source(s) or may indicate that the compounds are endemic to the area.

As stated in the May 5, 1992, Semi-Annual Report, the initial background concentrations of certain parameters were higher in downgradient monitoring wells than in the corresponding upgradient monitoring wells prior to acceptance of waste(s) at this landfill. Discussions of site conditions are offered in the May 5, 1992, Semi-Annual Report (Attachment F) and should be referenced.

3. WELL MAINTENANCE AND RE-EVALUATION PLAN

Monitoring Well Performance Evaluation Reports dated June 10, 1993; March 30, 1998; and June, 2003 were prepared and submitted in accordance with IAC 567-113.21. The 2003 Report (most recent) concluded that the integrity of all MW's was intact, and that no changes in the HMSP were recommended. Monitoring well reevaluation is tentatively scheduled for June, 2008, and will again include monitoring wells associated with Trenches 1-6.

Review of the water elevation data for 2004 does not indicate excessive variability compared to historic water elevation data. Water elevation data is summarized in Attachment G. Based on the available water elevation data, the assessment of well conditions, and the hydrologic conditions at the site, the semi-annual water level measurements are interpreted to be sufficient to gauge notable changes in the site hydrology. The September, 2004 Water Table Contour Map and the September, 2004 Potentiometric Water Surface Map for the Upper Aquifer Sand Layer are included in Attachment G.

4. LCS PERFORMANCE

The leachate control system (LCS) consists of a series of gravity collection pipes that underlie the trench fills. Trenches 1 through 4 are located north of a topographic divide and the LCS drain north to a City of Ames interceptor sanitary sewer located along the stream to the north. The LCS in Trenches 5 and 6 are located south of the topographic divide and drains south to a City of Ames interceptor sanitary sewer located along the railroad to the south.

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Filling and capping on the north end of Trenches 1 – 4 is complete. As required by the approved Development and Operational Plans (DOPS), leachate head monitoring wells have been installed at the downgradient point within each Trench. The four (4) leachate piezometers were installed in May, 2003.

Leachate Head elevations at the four (4) piezometers has been recorded monthly since installation and are summarized in the Table and graphs included in Attachment H. In summary, the leachate head elevation data demonstrates that the LCS is functioning as intended. The piezometers in Trench 1 & 2 are most frequently recorded as dry. The leachate thickness in Trench 3 has been recorded as ranging from 1.5 feet to 0.3 feet. The leachate thickness in Trench 4 has been recorded as ranging from 3.6 feet to 1.0 feet.

Based on information provided by the City of Ames (Attachment I), pretreatment testing results for May 3, 2004; and September 20, 2004 are as follows:

Parameter	Permit Limit (mg/L)	Allowance Discharge (mg/L)	05/3/04 Results (mg/L)	09/20/04 Results (mg/L)
pH	6.0-10.0		7.18	6.86
TSS	1,500/300		13	6.2
Ammonia-N	200/40		35	39
COD	2,500/250	1,500	460	450
TKN	/40	250	42	NT
BTEX	0.75		<0.25	<0.011
PCE			<0.25	NT
p-Cresol		0.025	<0.005	NT
Alpha-Terpineol		0.033	<0.005	NT
Benzoic Acid		0.12	<0.02	NT

Chemical analysis of the leachate indicates that all parameters are within permit limits. The volume of leachate conveyed to the Ames Water Pollution Control Plant is reported as 2,244 gallons per month (approximately 26,932 gpy).

The leachate system was cleaned November 29, 2002 as per IAC 567-113.26(11)a.8. Line cleaning is tentatively scheduled with Service Tech of Ames for November/December, 2005.

Annual Groundwater Quality Report

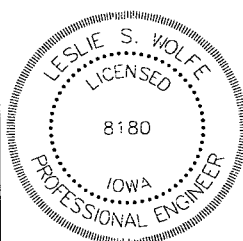
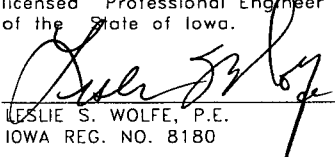
5. EXPLOSIVE GAS MONITORING

Explosive gas monitoring was performed quarterly through September, 2004, per IAC 567-113.26(15). Results of the explosive gas monitoring indicate that explosive gases were within applicable limits in site structures and along the entire site perimeter. In addition, carbon monoxide (CO) and hydrogen sulfide (H₂S) gases were undetected. Gas monitoring results are summarized in the table in Attachment J.

6. RECOMMENDATIONS

- a. Continue to perform semi-annual and annual sampling episodes in accordance with Special Provision X.7 of the Permit.
- b. Continue to perform semi-annual water level measurements in March and September of each year and reevaluate the data in the Annual Groundwater Quality Report in November of each year.
- c. ***A reduction in the frequency of leachate elevation measurements is requested.***
It is requested that the frequency of measurements be reduced from monthly to quarterly. The leachate elevation data will continue to be evaluated in the Annual Groundwater Quality Report/Leachate Control System Performance Evaluation in November of each year.
- d. The leachate collection lines in Trenches 1 through 6 should be cleaned as necessary according to IAC 567-113.26(11)a.8 in 2005.
- e. Continue to perform quarterly explosive gas monitoring and report the results in the Annual Groundwater Quality Report each November.

If the Department has any questions or if additional information is needed, contact Mr. William Fedeler, Owner, or myself at the FOX Engineering office in Ames.

	I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.	
		11/30/04
	LESLIE S. WOLFE, P.E. IOWA REG. NO. 8180	DATE
	My license renewal date is December 31, 2005.	
	Pages or sheets covered by this seal: All	

ATTACHMENT A
Permit, Permit Amendment, and Correspondence



STATE OF IOWA

THOMAS J. VILSACK, GOVERNOR
SALLY J. PEDERSON, LT. GOVERNOR

DEPARTMENT OF NATURAL RESOURCES
JEFFREY R. VONK, DIRECTOR

January 22, 2004

RECEIVED JAN 29 2004

William K. Fedeler
P.O. Box 2483
Ames, IA 50010

RE: Ames-Story Environmental C&D Landfill, Inc.
Permit No. 85-SDP-13-91P
Amendment #1

Dear Mr. Fedeler:

Enclosed is Amendment #1 to the permit issued on November 24, 2003, for the Ames-Story Environmental C&D Landfill, Inc. The amendment and approved plans must be kept with the permit and the approved plans at the sanitary disposal project in accordance with solid waste rule 567 IAC 114.26(2)"c". Please review this amendment with your operators, as they must become familiar with it.

The enclosed amendment incorporates: 1) The construction documentation forms for leachate head piezometers LPZ-T1-1, LPZ-T2-1, LPZ-T3-1, and LPZ-T4-1, as submitted by FOX Engineering Associates, Inc. on November 24, 2003; and 2) The request letter from FOX Engineering Associates, Inc. dated December 18, 2003, concerning the waste tonnage calculation methodology; as part of the permit documents.

Note that the amendment contains conditions that may require a response or action by you which, if not properly complied with, may prompt enforcement action by this department.

If you have any questions, you may contact me at 515/281-8968.

Sincerely,

Jeff Simmons
Environmental Engineer
Energy & Waste Management Bureau

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Attachments

copy: Douglas J. Luzbetak, P.E.
FOX Engineering Associates, Inc.
1601 Golden Aspen Drive, Suite 103
Ames, IA 50010

DNR Field Office #5

Nina Koger, DNR

Jeff Simmons, DNR

**IOWA DEPARTMENT OF NATURAL RESOURCES
AMENDMENT #1**

Issued by:

Nina M. Koger

Nina M. Koger
Environmental Services Division

For: the Director

Date Issued: January 22, 2004

Permit number 85-SDP-13-91P, issued on November 24, 2003, for the Ames-Story Environmental C&D Landfill, Inc. is hereby amended by the following:

1. The documentation forms for the construction of leachate head piezometers LPZ-T1-1, LPZ-T2-1, LPZ-T3-1, and LPZ-T4-1 as submitted by FOX Engineering Associates, Inc. on November 24, 2003; are incorporated as part of the permit documents.
2. The waste tonnage calculation methodology described in the letter from FOX Engineering Associates, Inc. dated December 18, 2003; is hereby approved and incorporated as part of the permit documents. The following conditions shall apply:
 - a. The permit holder shall be responsible for annually weighing on an off-site certified scale, a minimum of twelve of each type of vehicle and container waste load to use as a basis for determining the average waste tonnage for the various types of waste holding vehicles that utilize the landfill.
 - b. The permit holder shall be responsible for attaching supporting documentation for tonnage calculations to the Solid Waste Fee Schedule and Retained Fee Report on a semiannual basis, commencing with the report due April 1, 2004.



STATE OF IOWA

THOMAS J. VILSACK, GOVERNOR
SALLY J. PEDERSON, LT. GOVERNOR

DEPARTMENT OF NATURAL RESOURCES
JEFFREY R. VONK, DIRECTOR

November 24, 2003

William K. Fedeler
P.O. Box 2483
Ames, IA 50010

RE: Ames-Story Environmental C&D Landfill, Inc.
Permit No. 85-SDP-13-91P
Permit Renewal

Dear Mr. Fedeler:

Enclosed is the renewed permit for the Ames-Story Environmental C&D Landfill, Inc. The permit and the approved plans must be kept at the sanitary disposal project in accordance with solid waste rule 567 IAC 114.26(2)"c". Please review the permit with your operators, as they must become familiar with it.

Note that the permit contains special provisions that may require a response or action by you which, if not properly complied with, may prompt enforcement action by this department.

Please note that Special Provision #11 requires that by January 1, 2004, either an on-site scale is provided or a plan is submitted that details an alternative method for determining waste tonnage, such as annually weighing several representative truckloads of waste at a certified scale to use as a basis for establishing the waste conversion weights for different types of trucks.

The submitted application was reviewed and placed in the permit record files. No plan updates were submitted with the application.

If you have any questions regarding this permit, please contact me at 515/281-8968 or Nina Koger at 515/281-8986.

Sincerely,

Jeff Simmons
Environmental Engineer
Energy & Waste Management Bureau

JNS\NSJ:AmesStoryEnv03pmtX.doc

Attachment

copy: Douglas J. Luzbetak, P.E.
FOX Engineering Associates, Inc.
1601 Golden Aspen Drive, Suite 103
Ames, IA 50010

DNR Field Office #5

Nina Koger, DNR

Jeff Simmons, DNR

**IOWA DEPARTMENT OF NATURAL RESOURCES
SANITARY DISPOSAL PROJECT PERMIT**

- I. **Permit Number:** 85-SDP-13-91P
 Ames-Story Environmental C&D Landfill, Inc.
- II. **Permitted Agency:** Ames-Story Environmental Landfill, Inc.
- III. **Project Location:** Parcel "A" [Lot 3 and the West 100 feet of Lot 2, Dayton Road Development Subdivision] and approximately the West 508.1 feet of Lot 1 in Block 5, Landfill Addition; both parcels located in the corporate limits of the city of Ames and in a portion of the E½ of Section 1, T83N, R24W, Story County, Iowa
- IV. **Responsible Official**
- Name: William K. Fedeler
Address: P.O. Box 2483
 Ames, IA 50010
Phone: 515/232-5864
- V. **Licensed Design Engineer**
- Name: Douglas J. Luzbetak, P.E.
Address: FOX Engineering Associates, Inc.
 1601 Golden Aspen Drive, Suite 103
 Ames, IA 50010
Phone: 515/233-0000
FAX: 515/233-0103
- Iowa License Number: 12654
- VI. **Date Permit Issued:** November 24, 2003
- VII. **Permit Expiration Date:** November 24, 2006
- VIII. **Issued by:** Pina M. Kogge
 Environmental Services Division
 for the Director
- IX. **General Provisions**

The above named permitted agency is hereby authorized to operate a sanitary landfill at the described location in conformance with Iowa Code Chapter 455B, the rules pursuant thereto existing at the time of issuance, and any subsequent new rules which may be duly adopted, and any provisions contained in Section X of this permit.

The project shall be operated according to the engineering plans and specifications approved by the Department of Natural Resources and these shall become a part of this permit. Any modifications or deviations from the engineering plans and specifications must have prior approval by the Department and an amendment to this permit issued.

The permitted service areas and conditions are specified in Special Provision #1 in Section X. Any deviations from the specified comprehensive planning documents, including changes in waste accepted from outside the permitted service areas, or any changes in the amount of waste, or changes in the waste stream shall have prior comprehensive planning approval by the Department.

The issuance of this permit in no way relieves the applicant of the responsibility for complying with all other local, state, and federal statutes, ordinances, and rules or other requirements applicable to the establishment and operation of this sanitary landfill.

No legal or financial responsibility arising from the construction or operation of the approved project shall attach to the State of Iowa or the Department of Natural Resources due to the issuance of this permit.

If title to this project is transferred, the new owner must apply to the Department for a transfer of this permit within thirty days of the date of title transfer. This permit is void sixty days after the date of title transfer unless the Department has transferred the permit.

The permit holder shall file a quarterly Solid Waste Fee Schedule and Retained Fee Report utilizing the Department's Form 542-3276 and tonnage fee payment, as applicable, for all wastes received, recycled/reused, and disposed at the sanitary landfill in accordance with Iowa Code section 455B.310. The quarterly report shall incorporate a detailed breakdown of all accepted solid waste authorized under this permit.

The permit holder is required to maintain records for the service area of tonnages accepted at this facility. Records shall be developed and maintained in such a way that tonnages from each county/state may be tracked in order to provide the local solid waste agency and the Department with accurate statistics from which generation/diversion rates will be derived. The reported tonnage shall be separated by Boone County, Greene County, Story County, Dallas County, and Calhoun County, consistent with the service area as detailed in Special Provision #1. The reports are due on a quarterly basis. The reports will be due January 1, April 1, July 1 and October 1 for the quarters ending September 30, December 31, March 31 and June 30, respectively. The permit holder shall mail the completed form to the Planning, Permitting and Engineering Services Section, Wallace State Office Building, 502 East Ninth Street, Des Moines, Iowa 50319. This reporting procedure supersedes any previous conflicting permit provisions.

The permit holder is prohibited from burying or burning yard waste as stipulated under 567 IAC 105.1(3) and Iowa Code sections 455D.9(1) and (6). Yard waste is defined in 567 IAC 100.2(455B,455D) as grass clippings, leaves, garden waste, brush and trees. Yard waste does not include tree stumps. Clearing and grubbing wastes generated at the landfill site and tree stumps may be buried. Only yard waste which has been separated at its source from other solid waste may be accepted by the permit holder for reuse purposes if authorized in Section X of this permit or after obtaining the necessary permit amendments. This prohibition supersedes any previous conflicting permit provisions.

Solid waste disposed at this site shall not exhibit free liquids, toxic or hazardous properties. No hazardous wastes as defined by Iowa Code section 455B.411 may be disposed at this landfill.

The permit holder is prohibited from disposing of nickel-cadmium, mercuric oxide, and sealed lead-acid household batteries, as specified in 567 IAC 145.1(455B,455D), effective beginning September 20, 1995.

This facility shall be staked as necessary and inspected on a semiannual basis by a professional engineer licensed in the State of Iowa. The engineer shall prepare a brief report describing the site's conformance

and nonconformance with the permit and the approved plans and specifications during the inspections. These reports shall be submitted by May 1 and November 1 each year to the Department's Main and local Field offices. The Department shall be notified if any inspection reveals any nonconformance with the permit and approved plans and specifications.

Failure to comply with Iowa Code Chapter 455B, or any rule of order promulgated pursuant thereto, or any or all provisions of this permit may result in 1) a civil penalty of up to \$5000 for each day of violation, pursuant to Iowa Code section 455B.307, or 2) the suspension or revocation of this permit, pursuant to Iowa Code section 455B.305.

X. Special Provisions

1. The permit holder is authorized to accept construction and demolition wastes, diseased trees, tree stumps, nonhazardous petroleum-contaminated soils, and asbestos for disposal in accordance with the approved Central Iowa Solid Waste Management Association Comprehensive Plan, Part I. The Comprehensive Plan, Part I as approved by the Department on March 31, 2003; any approved amendments to the plan; and the latest plan update, are hereby incorporated as permit plan documents.

The permitted service area includes: All cities and the unincorporated area, including Woodward State Hospital, in Boone County; all cities, excluding Jefferson, and the unincorporated area in Greene County; the cities of Ames, Cambridge, Colo, Gilbert, Huxley, Kelley, Maxwell, McCallsburg, Nevada, Roland, Slater, Story City, Zeiring and the unincorporated area in Story County; the cities of Bouton, Granger, and Woodward in Dallas County; and the cities of Farnhamville, Lohrville, and Somers in Calhoun County.

In accordance with 567 IAC 101.8(2), the permit holder shall submit the Comprehensive Solid Waste Management Plan, Part I update to the Department approved plan by November 1, 2005.

2. The permit holder shall develop and operate the site in accordance with: 1) The Revised Development Plan (RDP) dated March 29, 1996, as submitted by FOX Engineering Associates, Inc. and approved on May 14, 1996; and 2) Revised Figure 20 dated September 1998, Revised Figure 28 dated July 2, 1998, and Plan Sheet 4 updated September 24, 1998, all as submitted by FOX Engineering Associates, Inc. and approved on September 29, 1998.
 - a. The approved site vertical height shall not exceed a maximum waste elevation of 970 in the North central waste area and 967 feet in the South central waste area.
 - b. The approved horizontal site development is limited to Trenches #1, #2, #3, and #4 in the North waste area; and to Trenches #5 and #6 in the South waste area.

Revised Figures 20 and 28 and updated Plan Sheet 4 of the RDP have been revised to show the omission of previously designated Trench #7.

- c. The Department acknowledges the deviation from IAC 567 IAC 114.26(1)"m"(6) relative to the separation distance from the adjacent property line, as documented by a waiver granted by the adjacent property owner on March 5, 1996.
 - d. The Construction Certification dated May 13, 1996, as submitted by FOX Engineering Associates, Inc. and approved on May 14, 1996, is incorporated as part of the permit documents.

- e. The detailed soils inventory for the liner system, and weekly, intermediate, and final cover usage as submitted by FOX Engineering Associates, Inc. under cover letter dated June 6, 1996 and approved on September 13, 1996, is incorporated as part of the permit documents.
 - f. In accordance with the variance approval of February 19, 1999, the permit holder was authorized to increase in the liner side slope from a maximum of 4:1 to a 3:1 side slope on the north perimeter slope of the Trench 5 expansion area as shown on Plan Sheet 4 of the RDP updated January 4, 1999, and prepared by FOX Engineering Associates, Inc.
 - g. The Construction Certification for Trench #5, dated June 11, 1999, as submitted by FOX Engineering Associates, Inc. and approved on July 12, 1999, is incorporated as part of the permit documents.
 - h. The Construction Certification for Trench #6, dated May 10, 2000, as submitted by FOX Engineering Associates, Inc. and approved on May 26, 2000, is incorporated as part of the permit documents.
3. Solid waste shall be deposited at the toe of the working face, spread in two foot layers, and compacted on a 3:1 slope.
 4. Litter fences shall be used when needed to confine windblown materials to the operating area.
 5. Surface water shall be diverted around the fill area and surface drainage shall be provided at the toe of the working face.
 6. An all weather fill area accessible during all weather conditions under which solid waste is received and disposed at the site shall be provided at all times.
 7. Hydrologic monitoring at the site shall be conducted in accordance with the Hydrologic Monitoring System Plan (HMSP) dated March 29, 1996, as submitted by FOX Engineering Associates, Inc. and approved on May 14, 1996; and the following provisions:
 - a. The HMSP for the North and South waste areas shall include the following:

Water table monitoring points, consisting of upgradient groundwater monitoring point MW-37; and downgradient groundwater monitoring points MW-6, MW-23, MW-24, MW-25, MW-28, MW-31, MW-34*, MW-35*, MW-39, MW-40, and MW-43.

Uppermost Aquifer monitoring points, consisting of upgradient groundwater monitoring point MW-36; and downgradient groundwater monitoring points MW-7, MW-8, MW-29, MW-30, MW-32, MW-33, MW-34*, MW-35*, MW-38, MW-41, and MW-42.

Surface Water monitoring points, consisting of upgradient surface water monitoring points SW-1 and SW-4; and downgradient surface water monitoring points SW-2, SW-3, SW-5, SW-6.

* Screened across both the water table and the uppermost aquifer.

- b. Monitoring points not designated for water quality monitoring shall be retained as water level measuring points.
 - c. Department construction documentation form 542-1277 and boring logs for all monitoring wells and piezometers shall be submitted within 30 days of installation. Department construction documentation form 542-1323 shall be submitted within 30 days of establishing surface water monitoring points. Abandonment of any monitoring well requires prior approval by the Department. Well abandonment document DNR FORM 542-1226 shall be submitted within 30 days of plugging a well.
 - d. First year quarterly samples shall be collected from any designated new monitoring well, dewatering system, and any monitoring point which lacks four quarterly samplings and analyzed for the parameters listed in 567 IAC 114.26(4)"d", "e" and "f". Baseline testing for the parameters listed in 567 IAC 114.26(4)"f" shall be conducted during the fall. All statistical evaluations shall include the updated baseline and subsequent sampling documentation.
 - e. Continued semiannual sampling shall take place in March and September of each year and be analyzed for the parameters listed in 567 IAC 114.26(4)"e". Routine annual testing for the parameters listed in 567 IAC 114.26(4)"f" shall be conducted during September of each year.
 - f. The Method Detection Limit (MDL) for the test parameters shall not exceed action levels as defined in 567 IAC Chapter 133. If the action levels cannot be feasibly achieved using procedures described in 567 IAC 114.26(5), then the MDL shall not exceed the lowest feasible level.
 - g. Samples collected for dissolved metals analysis shall be field filtered, preserved, and promptly transferred to a certified laboratory for analysis.
 - h. If laboratory results exceed the upgradient mean plus two standard deviations or the Maximum Contaminant Level (MCL) for any parameter, the Department shall be notified within 30 days of receipt of the analytical results.
 - i. Surface monitoring points must be clearly marked in the field and a method for measuring the flow rate at each sampling point shall be devised.
 - j. Results of all analysis and the associated Department sampling forms 542-1322 and 542-1324 shall be submitted to the Department's Main and local Field offices within 45 days of the sample collection.
 - k. An Annual Water Quality Report (AWQR) summarizing the effects the facility is having on groundwater and surface water quality shall be submitted to the Department's Main and local Field offices by November 30 each year. This report shall be prepared in accordance with 567 IAC 114.26(8)"d" by a Professional Engineer licensed in the State of Iowa. The AWQR shall include the results of the semiannual groundwater measurements and the routine groundwater analyses conducted at the monitoring points. The Special Waste Authorization information no longer needs to be addressed in the AWQR, but instead shall now be provided in the Solid Waste Fee Schedule and Retained Fee Report.
8. In accordance with the variance approval of November 10, 1998, the permit holder is authorized to reduce the frequency of groundwater level measurements from monthly, as required by 567 IAC

114.26(4)"b", to semiannually. The measurements shall be taken during the semiannual sampling events, with the results submitted in the corresponding semiannual monitoring reports and the Annual Water Quality Report.

9. The permit holder is authorized to construct and operate the leachate control system in accordance with the Leachate Control Plan (LCP) as provided in the RDP dated March 29, 1996, and prepared by FOX Engineering Associates, Inc. and approved on May 14, 1996; the revisions as noted in Special Provision #2 above; and the following conditions:
 - a. Leachate collected from the leachate control system shall be disposed of either by treatment in an on-site facility with an NPDES permit or by discharge to the City of Ames publicly owned treatment works (POTW). If the discharge is to a POTW with a pretreatment program approved by the Department, the discharge must comply with the terms and conditions of a local permit issued for the discharge by the POTW. If the discharge is to a POTW without an approved pretreatment program a completed treatment agreement form shall be submitted to the Department's Wastewater Section. Copies of the local permit or treatment agreement shall be provided to the Department's Energy and Waste Management Bureau and the local Field office. The treatment agreement must be on DNR Form 31 (542-3221) and must comply with the requirements of 567 IAC 64.3(5).
 - b. In accordance with 567 IAC 114.26(11)"d", the Department shall be notified and the site inspected when the initial construction of each phase of the leachate control system has been completed. Prior to the inspection, construction certification reports shall be submitted to the Department's Main and local Field offices. No waste disposal shall commence in a new phase until the site development has been inspected and approved by the Department.
 - c. The leachate control system shall be operated and maintained in accordance with the approved permit documents. After implementation of the leachate control system, the permit holder shall routinely collect the necessary information and evaluate the effectiveness of the system in controlling the leachate. All documentation shall be summarized in a Leachate Control System Performance Evaluation (LCSPE) Report. Effective control shall be considered as maintaining compliance with maximum leachate head as defined in 567 IAC 114.26(11)"a"(1), achieving the lowest possible leachate head as required in 567 IAC 114.26(12)"b"(2), and maintaining surface and groundwater quality standards at compliance monitoring points.
 - d. Leachate head levels and elevations shall be measured monthly at all piezometers and the volume of leachate collected and transported to the treatment works recorded. Records of leachate contaminants testing required by the treatment works and any NPDES permit for on-site treated leachate discharges shall be maintained.
 - e. The permit holder shall annually submit the LCSPE Report, including record data, as a supplement to the facility Annual Water Quality Report, as defined in 567 IAC 114.26(8)"d". The performance evaluation shall include proposed additional leachate control measures and an implementation schedule in the event that the constructed system is not performing effectively.
 - f. In accordance with the variance approval of April 12, 1991, on-site leachate storage is waived at this time. An on-site leachate storage system shall be required upon the event that any complications arise or if the city of Ames can no longer accommodate direct discharge from the landfill.

10. The permit holder shall quarterly monitor and annually report site methane concentrations in accordance with 567 IAC 114.26(15)"b" after May 18, 1994. Specific actions, as defined in the rules, shall be taken in the event of methane gas level limit exceedances.

The annual report summarizing the methane gas monitoring results and any action taken resulting from gas levels exceeding the specified limits during the previous 12 months shall be submitted to the Department's Main and local Field offices by November 30 of each year.

11. The permit holder shall provide on-site scale facilities for the purposes of weighing and reporting solid wastes disposed of at the landfill. If conditions are such that make it impractical to provide an on-site scale, then off-site scale facilities or an alternative method to weighing may be used if justified and approved by the Department. The permit holder shall comply with the waste weighing, record keeping and tonnage fee reporting requirements defined in 567 IAC 101.9(455B,455D). The scale weighing facilities shall comply with the certification and licensing requirements of the Iowa Department of Agriculture and Land Stewardship. Certification shall be maintained current at all times. The permit holder shall submit a copy of the weighing scale facility licensing certificate issued by the Iowa Department of Agriculture and Land Stewardship and a copy of renewals shall be provided to the Department's Main and local Field offices.

The landfill does not currently have an on-site scale or an alternative method for determining waste tonnage approved. Therefore, the Department requires that the permit holder provide an on-site scale facility, or a request for approval of an alternative plan with included justification by no later than January 1, 2004.

12. The Emergency Response and Remedial Action Plan (ERRAP) submitted by FOX Engineering Associates, Inc. and dated December 2001, in compliance with 567 IAC 114.30(455B) was approved by the Department on January 17, 2002. An updated ERRAP shall be submitted at the time of each permit renewal application. An updated ERRAP shall be included with any request for permit modification to incorporate a facility expansion or significant changes in facility operation that require modification of the currently approved ERRAP.
13. The permit holder shall close the landfill site in accordance with the Closure/Post Closure Plan (C/PCP) dated March 15, 1996, as prepared by FOX Engineering Associates, Inc. and approved on May 14, 1996.
 - a. The clearance, dated May 13, 1996, from the Natural Resources Conservation Service relative to compliance with wind and soil loss limit regulations, in accordance with 567 IAC 114.26(1)"j" for all development areas, is incorporated as part of the permit documents.

ATTACHMENT B
Analytical Data & Summary Tables

AMES-STORY ENVIRONMENTAL LANDFILL
85-SDP-13-91P
MONITORING WELL SAMPLING RESULTS

NORTH TRENCHES

SAMPLING DATE: Sept. 27, 2004																	
PARAMETER	ACTION LEVEL	U.G.W MW 22	U.G.W MW 28	U.A.W MW 27	U.A.W MW 29	D.G.W MW 23	D.G.W MW 24	D.G.W MW 26	D.G.W MW 31	D.A.W MW 30	D.A.W MW 32	BOTH MW 25	BOTH MW 33	BOTH MW 34	SURFACE MONITORING PTS.		
															SW 1	SW 2	SW 3
ug/L																	
Benzene *	5	Plugged	NT	Plugged	NT	NT	NT	Plugged	NT	NT	NT	NT	NT	NT	NT	NT	dry
Carbon tetrachloride *	5	Plugged	NT	Plugged	NT	NT	NT	Plugged	NT	NT	NT	NT	NT	NT	NT	NT	dry
1,4-Dichlorobenzene *	75	Plugged	NT	Plugged	NT	NT	NT	Plugged	NT	NT	NT	NT	NT	NT	NT	NT	dry
1,2-Dichloroethane *	5	Plugged	NT	Plugged	NT	NT	NT	Plugged	NT	NT	NT	NT	NT	NT	NT	NT	dry
1,1-Dichloroethene *	7	Plugged	NT	Plugged	NT	NT	NT	Plugged	NT	NT	NT	NT	NT	NT	NT	NT	dry
1,1,1-Trichloroethane *	200	Plugged	NT	Plugged	NT	NT	NT	Plugged	NT	NT	NT	NT	NT	NT	NT	NT	dry
Trichloroethene *	5	Plugged	NT	Plugged	NT	NT	NT	Plugged	NT	NT	NT	NT	NT	NT	NT	NT	dry
mg/L																	
Arsenic, dissolved	0.05	Plugged	NT	Plugged	NT	NT	NT	Plugged	NT	NT	NT	NT	NT	NT	NT	NT	dry
Barium, dissolved	2.0	Plugged	NT	Plugged	NT	NT	NT	Plugged	NT	NT	NT	NT	NT	NT	NT	NT	dry
Cadmium, dissolved	0.005	Plugged	NT	Plugged	NT	NT	NT	Plugged	NT	NT	NT	NT	NT	NT	NT	NT	dry
Chromium, dissolved	0.1	Plugged	NT	Plugged	NT	NT	NT	Plugged	NT	NT	NT	NT	NT	NT	NT	NT	dry
Lead, dissolved	0.015	Plugged	NT	Plugged	NT	NT	NT	Plugged	NT	NT	NT	NT	NT	NT	NT	NT	dry
Mercury, dissolved	0.002	Plugged	NT	Plugged	NT	NT	NT	Plugged	NT	NT	NT	NT	NT	NT	NT	NT	dry
Magnesium, dissolved	--	Plugged	NT	Plugged	NT	NT	NT	Plugged	NT	NT	NT	NT	NT	NT	NT	NT	dry
Zinc, dissolved	2	Plugged	NT	Plugged	NT	NT	NT	Plugged	NT	NT	NT	NT	NT	NT	NT	NT	dry
Iron, dissolved	--	Plugged	<0.03	Plugged	0.034	<0.030	<0.03	Plugged	3.51	0.454	<0.030	0.034	2.56	0.39	<0.030	0.036	dry
Copper, dissolved	1.3	Plugged	NT	Plugged	NT	NT	NT	Plugged	NT	NT	NT	NT	NT	NT	NT	NT	dry
Chloride	--	Plugged	100	Plugged	<10	15	25	Plugged	35	<10	15	49	51	21	111	138	dry
Nitrogen, Ammonia	--	Plugged	<1	Plugged	<1.0	<1.0	<1.0	Plugged	<1.0	<1.0	<1.0	<1.0	2.2	1	<1.0	<1.0	dry
Chemical Oxygen Demand	--	Plugged	17	Plugged	<10	17	12	Plugged	30	<10	16	16	37	21	14	<10	dry
Total Organic Halogens	--	Plugged	0.03	Plugged	0.014	0.047	NT	Plugged	0.101	<0.010	0.01	0.034	0.034	0.012	0.046	0.044	dry
Phenols	--	Plugged	<0.100	Plugged	<0.100	<0.100	NT	Plugged	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	dry
pH	--	Plugged	7.3	Plugged	7.7	7.1	7.1	Plugged	7	7.5	7	7	7.1	7.2	9.4	8.4	dry
Temperature, celsius	--	Plugged	21	Plugged	17	16	10	Plugged	15	15	12	15	15	18	22	21	dry
Conductivity, mv	--	Plugged	1580	Plugged	760	1398	1138	Plugged	1870	848	1216	1546	1300	1218	871	1096	dry

U.A.W - Upgradient aquifer well

NT - Not tested

D.G.W. - Downgradient groundwater well

D.A.W. - Downgradient aquifer well

U.G.W - Upgradient groundwater well

AMES-STORY ENVIRONMENTAL LANDFILL
85-SDP-13-91P
MONITORING WELL SAMPLING RESULTS

SOUTH TRENCHES

SAMPLING DATE: Sept. 27, 2004																		
ACTION				BOTH	U.A.W	U.G.W	D.G.W	D.A.W	D.A.W	D.A.W	D.G.W	D.G.W	D.A.W	D.A.W	D.G.W	SURFACE MONITORING PTS.		
PARAMETER	LEVEL	FIELD	TRIP	MW 35	MW 36	MW37	MW 6	MW 7	MW 8	MW 38	MW 39	MW 40	MW 41	MW 42	MW 43	SW 4	SW 5	SW 6
ug/L																		
Benzene *	5	NT	<1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	dry	dry	NT
Carbon tetrachloride *	5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	dry	dry	NT
1,4-Dichlorobenzene *	75	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	dry	dry	NT
1,2-Dichloroethane *	5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	dry	dry	NT
1,1-Dichloroethene *	7	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	dry	dry	NT
1,1,1-Trichloroethane *	200	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	dry	dry	NT
Trichloroethene *	5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	dry	dry	NT
mg/L																		
Arsenic, dissolved	0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	dry	dry	NT
Barium, dissolved	2.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	dry	dry	NT
Cadmium, dissolved	0.005	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	dry	dry	NT
Chromium, dissolved	0.1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	dry	dry	NT
Lead, dissolved	0.015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	dry	dry	NT
Mercury, dissolved	0.002	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	dry	dry	NT
Magnesium, dissolved	--	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	dry	dry	NT
Zinc, dissolved	2	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	dry	dry	NT
Iron, dissolved	--	NT	NT	<0.030	<0.030	5.25	<0.030	0.267	4.16	0.229	0.136	<0.030	2.23	1.94	<0.030	dry	dry	4.67
Copper, dissolved	1.3	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	dry	dry	NT
Chloride	--	NT	NT	114	<10	12	56	14	<10	30	30	43	11	16	60	dry	dry	76
Nitrogen, Ammonia	--	NT	NT	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.3	dry	dry	1.0
Chemical Oxygen Demand	--	NT	NT	27	<10	<10	<10	<10	10	16	<10	<10	12	14	<10	dry	dry	23
Total Organic Halogens	--	NT	NT	0.029	<0.010	<0.010	0.074	0.013	<0.010	0.015	<0.010	0.01	<0.010	0.012	0.03	dry	dry	0.04
Phenols	--	NT	NT	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	dry	dry	<0.100
pH	--	NT	NT	7.2	7.5	7.1	6.7	7.8	7.6	7.3	7	7.6	7.7	7.5	6.8	dry	dry	7
Temperature, celsius	--	NT	NT	16	16	19	18	15	14	16	18	18	16	15	15	dry	dry	21
Conductivity, mv	--	NT	NT	995	750	1819	1673	822	774	1264	1588	1310	790	890	1254	dry	dry	1400

Accreditations:
Iowa DNR: 095
New Jersey DEP: IA001
Kansas DHE: E-10287

ANALYTICAL REPORT

October 12, 2004

Work Order: 14I1124

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Report To
Todd Whipple
Fox Engineering Associates, Inc.
1601 Golden Aspen Drive, Suite 103
Ames, IA 50010

Work Order Information
Date Received: 09/27/2004 10:55AM
Collector: Freeman, Richard
Phone: 515-233-0000
PO Number:

Project: Ames/Story C&D SLF
Project Number: [none]

Analyte	Result	MRL	Method	Analyst	Analyzed	Qualifier
14I1124-01	MW-37		Matrix: Water		Collected: 09/24/04 14:40	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	<10 mg/l	10	EPA 410.4	MAQ	09/28/04 13:24	
Chloride	12 mg/l	10	EPA 9252	MAQ	09/28/04 12:35	
Nitrogen, Ammonia	<1.0 mg/l	1.0	SM 4500-NH3 F	SAA	09/28/04 11:33	
Phenols, total	<0.100 mg/l	0.100	EPA 9065	KRV	09/30/04 10:53	
Total Organic Halogens (TOX)	<0.010 mg/l	0.010	EPA 9020	TVK	10/07/04 0:00	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	5.25 mg/l	0.030	EPA 6010B	LAR	09/29/04 16:41	
14I1124-02	MW-39		Matrix: Water		Collected: 09/24/04 10:10	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	<10 mg/l	10	EPA 410.4	MAQ	09/28/04 13:24	
Chloride	30 mg/l	10	EPA 9252	MAQ	09/28/04 12:35	
Nitrogen, Ammonia	<1.0 mg/l	1.0	SM 4500-NH3 F	SAA	09/28/04 11:33	
Phenols, total	<0.100 mg/l	0.100	EPA 9065	KRV	09/30/04 10:53	
Total Organic Halogens (TOX)	<0.010 mg/l	0.010	EPA 9020	TVK	10/07/04 0:00	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	0.136 mg/l	0.030	EPA 6010B	LAR	09/29/04 16:45	
14I1124-03	MW-40		Matrix: Water		Collected: 09/24/04 12:30	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	<10 mg/l	10	EPA 410.4	MAQ	09/28/04 13:24	
Chloride	43 mg/l	10	EPA 9252	MAQ	09/28/04 12:35	
Nitrogen, Ammonia	<1.0 mg/l	1.0	SM 4500-NH3 F	SAA	09/28/04 11:33	
Phenols, total	<0.100 mg/l	0.100	EPA 9065	KRV	09/30/04 10:53	
Total Organic Halogens (TOX)	0.010 mg/l	0.010	EPA 9020	TVK	10/07/04 0:00	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	<0.030 mg/l	0.030	EPA 6010B	LAR	09/29/04 16:49	
14I1124-04	MW-36		Matrix: Water		Collected: 09/24/04 14:30	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted.
MRL = Method Reporting Limit.

Fox Engineering Associates, Inc.
1601 Golden Aspen Drive, Suite 103
Ames, IA 50010

October 12, 2004

Work Order: 14I1124

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Analyte	Result	MRL	Method	Analyst	Analyzed	Qualifier
14I1124-04 MW-36			Matrix: Water		Collected: 09/24/04 14:30	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	<10 mg/l	10	EPA 410.4	MAQ	09/28/04 13:24	
Chloride	<10 mg/l	10	EPA 9252	MAQ	09/28/04 12:35	
Nitrogen, Ammonia	<1.0 mg/l	1.0	SM 4500-NH3 F	SAA	09/28/04 11:33	
Phenols, total	<0.100 mg/l	0.100	EPA 9065	KRV	09/30/04 10:53	
Total Organic Halogens (TOX)	<0.010 mg/l	0.010	EPA 9020	TVK	10/07/04 0:00	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	<0.030 mg/l	0.030	EPA 6010B	LAR	09/29/04 16:53	
14I1124-05 MW-38			Matrix: Water		Collected: 09/24/04 09:50	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	16 mg/l	10	EPA 410.4	MAQ	09/28/04 13:24	
Chloride	30 mg/l	10	EPA 9252	MAQ	09/28/04 12:35	
Nitrogen, Ammonia	<1.0 mg/l	1.0	SM 4500-NH3 F	SAA	09/28/04 11:33	
Phenols, total	<0.100 mg/l	0.100	EPA 9065	KRV	09/30/04 10:53	
Total Organic Halogens (TOX)	0.015 mg/l	0.010	EPA 9020	TVK	10/07/04 0:00	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	0.229 mg/l	0.030	EPA 6010B	LAR	09/29/04 16:57	
14I1124-06 MW-41			Matrix: Water		Collected: 09/24/04 12:45	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	12 mg/l	10	EPA 410.4	MAQ	09/28/04 13:24	
Chloride	11 mg/l	10	EPA 9252	MAQ	09/28/04 12:35	
Nitrogen, Ammonia	<1.0 mg/l	1.0	SM 4500-NH3 F	SAA	09/28/04 11:34	
Phenols, total	<0.100 mg/l	0.100	EPA 9065	KRV	09/30/04 10:53	
Total Organic Halogens (TOX)	<0.010 mg/l	0.010	EPA 9020	TVK	10/07/04 0:00	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	1.10 mg/l	0.030	EPA 6010B	LAR	09/29/04 17:01	
14I1124-07 SW-1			Matrix: Water		Collected: 09/24/04 15:05	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	14 mg/l	10	EPA 410.4	MAQ	09/28/04 13:24	
Chloride	11 mg/l	10	EPA 9252	MAQ	09/28/04 12:35	
Nitrogen, Ammonia	<1.0 mg/l	1.0	SM 4500-NH3 F	SAA	09/28/04 11:34	
Phenols, total	<0.100 mg/l	0.100	EPA 9065	KRV	09/30/04 10:53	
Total Organic Halogens (TOX)	0.046 mg/l	0.010	EPA 9020	TVK	10/07/04 0:00	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	<0.030 mg/l	0.030	EPA 6010B	LAR	09/29/04 17:06	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. MRL= Method Reporting Limit.

Fox Engineering Associates, Inc.
1601 Golden Aspen Drive, Suite 103
Ames, IA 50010

October 12, 2004

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Work Order: 14I1124

Analyte	Result	MRL	Method	Analyst	Analyzed	Qualifier
14I1124-08 SW-2 TDW Matrix: Water Collected: 09/24/04 15:20						
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	<10 mg/l	10	EPA 410.4	MAQ	09/28/04 14:17	
Chloride	138 mg/l	10	EPA 9252	MAQ	09/28/04 12:35	
Nitrogen, Ammonia	<1.0 mg/l	1.0	SM 4500-NH3 F	SAA	09/28/04 11:34	
Phenols, total	<0.100 mg/l	0.100	EPA 9065	KRV	09/30/04 10:53	
Total Organic Halogens (TOX)	0.044 mg/l	0.010	EPA 9020	TVK	10/07/04 0:00	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	0.036 mg/l	0.030	EPA 6010B	LAR	09/29/04 17:18	
14I1124-09 MW-30 Matrix: Water Collected: 09/25/04 11:45						
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	<10 mg/l	10	EPA 410.4	MAQ	09/28/04 14:17	
Chloride	<10 mg/l	10	EPA 9252	MAQ	09/28/04 12:35	
Nitrogen, Ammonia	<1.0 mg/l	1.0	SM 4500-NH3 F	SAA	09/28/04 11:34	
Phenols, total	<0.100 mg/l	0.100	EPA 9065	KRV	09/30/04 10:53	
Total Organic Halogens (TOX)	<0.010 mg/l	0.010	EPA 9020	TVK	10/07/04 0:00	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	0.454 mg/l	0.030	EPA 6010B	LAR	09/29/04 17:22	
14I1124-10 MW-23 Matrix: Water Collected: 09/25/04 11:30						
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	17 mg/l	10	EPA 410.4	MAQ	09/28/04 14:17	
Chloride	15 mg/l	10	EPA 9252	MAQ	09/28/04 12:35	
Nitrogen, Ammonia	<1.0 mg/l	1.0	SM 4500-NH3 F	SAA	09/28/04 11:34	
Phenols, total	<0.100 mg/l	0.100	EPA 9065	KRV	09/30/04 10:53	
Total Organic Halogens (TOX)	0.047 mg/l	0.010	EPA 9020	TVK	10/07/04 0:00	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	<0.030 mg/l	0.030	EPA 6010B	LAR	09/29/04 17:26	
14I1124-11 MW-31 Matrix: Water Collected: 09/25/04 12:05						
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	30 mg/l	10	EPA 410.4	MAQ	09/28/04 14:17	
Chloride	35 mg/l	10	EPA 9252	MAQ	09/28/04 12:35	
Nitrogen, Ammonia	<1.0 mg/l	1.0	SM 4500-NH3 F	SAA	09/28/04 11:34	
Phenols, total	<0.100 mg/l	0.100	EPA 9065	KRV	09/30/04 10:53	
Total Organic Halogens (TOX)	0.101 mg/l	0.010	EPA 9020	TVK	10/08/04 0:00	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	3.51 mg/l	0.030	EPA 6010B	LAR	09/29/04 17:35	

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Fox Engineering Associates, Inc.
1601 Golden Aspen Drive, Suite 103
Ames, IA 50010

October 12, 2004

Work Order: 14I1124

Page 4 of 4

Analyte	Result	MRL	Method	Analyst	Analyzed	Qualifier
14I1124-12	SW-6		Matrix: Water		Collected: 09/25/04 12:45	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	23 mg/l	10	EPA 410.4	MAQ	09/28/04 14:17	
Chloride	76 mg/l	10	EPA 9252	MAQ	09/28/04 12:35	
Nitrogen, Ammonia	<1.0 mg/l	1.0	SM 4500-NH3 F	SAA	09/28/04 11:34	
Phenols, total	<0.100 mg/l	0.100	EPA 9065	SNT	09/30/04 12:33	
Total Organic Halogens (TOX)	0.040 mg/l	0.010	EPA 9020	TVK	10/08/04 0:00	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	4.76 mg/l	0.030	EPA 6010B	LAR	09/29/04 17:47	

End of Report




Keystone Laboratories, Inc.
Jim Eggers For Jeffrey King, Ph.D.
Laboratory Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. MRL= Method Reporting Limit.

Keystone

LABORATORIES, INC.

 600 E. 17th St. S.
Newton, IA 50208
Phone: 641-792-8451
Fax: 641-792-7989

3012 Ansborough Ave.
Waterloo, IA 50701
Phone: 319-235-4440
Fax: 319-235-2480
www.keystonelabs.com

**1304 Adams
Kansas City, KS 66103
Phone: 913-321-7856
Fax: 913-321-7937**

PAGE 1 OF 1

PRINT OR TYPE INFORMATION BELOW

SAMPLER: Richard Brown

SITE NAME: Amos Creek

ADDRESS: _____

CITY/ST/ZIP: _____

PHONE: _____

REPORT TO: _____
NAME: Todd Whipple
COMPANY NAME: fax
ADDRESS: _____
CITY/ST/ZIP: Ham-Of
PHONE: KMT 515-290-6693
FAX: _____

BILL TO: MR B. I. Fodor
NAME: _____
COMPANY NAME: Amos CSO
ADDRESS: PO Box 2483
CITY/ST/ZIP: Amos, IA 50012
PHONE: _____
KeyStone Quote No.: _____
(If Applicable)

(If Applicable)

[illegible]

Relinquished by: (Signature)		Received by: (Signature)		Turn-Around: <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush	
Date <u>2/24/04</u>		Date		Contact Lab Prior to Submission	
Time <u>PM</u>		Time			
Date		Received for Lab by: (Signature)		Remarks: <u>MOT-15 Samples</u>	
Time		Date <u>2/27/04</u>		Date <u>5/14/04</u>	
		Time <u>10:55 AM</u>			

FORM: CCR 7-97

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Accreditations:
Iowa DNR: 095
New Jersey DEP: IA001
Kansas DHE: E-10287

ANALYTICAL REPORT

October 14, 2004

Work Order: 14I1254

Page 1 of 3

Report To
Todd Whipple
Fox Engineering Associates, Inc.
1601 Golden Aspen Drive, Suite 103
Ames, IA 50010

Work Order Information
Date Received: 09/29/2004 10:30AM
Collector: Freeman, Richard
Phone: 515-233-0000
PO Number:

Project: Ames/Story C&D SLF
Project Number: [none]

Analyte	Result	MRL	Method	Analyst	Analyzed	Qualifier
14I1254-01 MW-32						

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MRL= Method Reporting Limit.

Fox Engineering Associates, Inc.
1601 Golden Aspen Drive, Suite 103
Ames, IA 50010

October 14, 2004

Page 2 of 3

Work Order: 14I1254

Analyte	Result	MRL	Method	Analyst	Analyzed	Qualifier
14I1254-04	MW-34		Matrix: Water		Collected: 09/28/04 10:05	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	21 mg/l	10	EPA 410.4	MAQ	10/01/04 15:42	
Chloride	21 mg/l	10	EPA 9252	MAQ	10/01/04 14:26	
Nitrogen, Ammonia	1.0 mg/l	1.0	SM 4500-NH3 F	SAA	10/01/04 11:29	
Phenols, total	<0.100 mg/l	0.100	EPA 9065	KRV	09/30/04 15:55	
Total Organic Halogens (TOX)	0.012 mg/l	0.010	EPA 9020	TVK	10/12/04 0:00	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	0.390 mg/l	0.030	EPA 6010B	LAR	09/30/04 15:39	
14I1254-05	MW-35		Matrix: Water		Collected: 09/28/04 10:15	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	27 mg/l	10	EPA 410.4	MAQ	10/01/04 15:42	
Chloride	114 mg/l	10	EPA 9252	MAQ	10/01/04 14:26	
Nitrogen, Ammonia	<1.0 mg/l	1.0	SM 4500-NH3 F	SAA	10/01/04 11:29	
Phenols, total	<0.100 mg/l	0.100	EPA 9065	KRV	09/30/04 15:55	
Total Organic Halogens (TOX)	0.029 mg/l	0.010	EPA 9020	TVK	10/12/04 0:00	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	<0.030 mg/l	0.030	EPA 6010B	LAR	09/30/04 15:44	
14I1254-06	MW-42		Matrix: Water		Collected: 09/28/04 09:25	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	14 mg/l	10	EPA 410.4	MAQ	10/01/04 15:42	
Chloride	16 mg/l	10	EPA 9252	MAQ	10/01/04 14:26	
Nitrogen, Ammonia	<1.0 mg/l	1.0	SM 4500-NH3 F	SAA	10/01/04 11:29	
Phenols, total	<0.100 mg/l	0.100	EPA 9065	KRV	09/30/04 15:55	
Total Organic Halogens (TOX)	0.012 mg/l	0.010	EPA 9020	TVK	10/12/04 0:00	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	1.94 mg/l	0.030	EPA 6010B	LAR	09/30/04 15:48	
14I1254-07	MW-43		Matrix: Water		Collected: 09/28/04 09:40	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	<10 mg/l	10	EPA 410.4	MAQ	10/01/04 15:42	
Chloride	60 mg/l	10	EPA 9252	MAQ	10/01/04 14:26	
Nitrogen, Ammonia	3.3 mg/l	1.0	SM 4500-NH3 F	SAA	10/01/04 11:29	
Phenols, total	<0.100 mg/l	0.100	EPA 9065	KRV	09/30/04 15:55	
Total Organic Halogens (TOX)	0.030 mg/l	0.010	EPA 9020	TVK	10/12/04 0:00	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	<0.030 mg/l	0.030	EPA 6010B	LAR	09/30/04 15:52	

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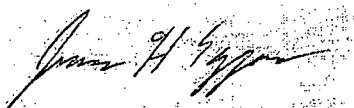
Fox Engineering Associates, Inc.
1601 Golden Aspen Drive, Suite 103
Ames, IA 50010

October 14, 2004

Work Order: 14I1254

Page 3 of 3

End of Report



Keystone Laboratories, Inc.
Jim Eggers For Jeffrey King, Ph.D.
Laboratory Director

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LABORATORIES, INC.

☐ 600 E. 17th St. S.
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Phone: 641-792-8451
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☐ 3012 Ansborough Ave.
Waterloo, IA 50701
Phone: 319-235-4440
Fax: 319-235-2480

☐ 1304 Adams
Kansas City, KS 66103
Phone: 913-321-7856
Fax: 913-321-7937

CHAIN OF CUSTODY RECORD

PRINT OR TYPE INFORMATION BELOW

SAMPLER: Richard Herrman

SITE NAME: Amos CED

ADDRESS: _____

CITY/ST/ZIP: _____

PHONE: _____

REPORT TO: NAME: Todd Whipple

COMPANY NAME: For Long

ADDRESS: _____

CITY/ST/ZIP: Amos

PHONE: KMF 515-292-6693

FAX: _____

BILL TO: NAME: MR B. J. Federal

COMPANY NAME: Amos CED

ADDRESS: P.O. Box 2483

CITY/ST/ZIP: Amos, IA 50010

PHONE: _____

Keystone Quote No.: _____ (If Applicable)

CLIENT SAMPLE NUMBER	DATE	TIME	SAMPLE LOCATION	NO. OF CONTAINERS	MATRIX	GRAB/COMPOSITE	ANALYSES REQUIRED	LABORATORY SAMPLE NUMBER
MW 32	9/28/04	8:30 AM	Monitoring Well 32	5	W	X		01
MW 33		9:00 AM		33				02
MW 25		8:50 AM		25				03
MW 34		10:05 AM		34				04
MW 35		10:15 AM		35				05
MW 42		9:25 AM		42				06
MW 43		9:40 AM		43				07

Relinquished by: (Signature) Richard Herrman Date: 9/29/04 Time: AM

Received by: (Signature) _____ Date: _____ Time: _____

Relinquished by: (Signature) _____ Date: _____ Time: _____

Received for Lab by: (Signature) Bill Date: 9/29/04 Time: 10:30 AM

Turn-Around: ☒ Standard ☐ Rush

Remarks: Metals Sample for Field

Contact Lab Prior to Submission

Original - Return with Report • Yellow - Lab Copy • Pink - Sampler Copy

FORM: CCR 7-97

Accreditations:
Iowa DNR: 095
New Jersey DEP: 1A001
Kansas DHE: E-10287

ANALYTICAL REPORT

October 19, 2004

Work Order: 14I1126

Page 1 of 3

Report To
Todd Whipple Fox Engineering Associates, Inc. 1601 Golden Aspen Drive, Suite 103 Ames, IA 50010

Work Order Information
Date Received: 09/27/2004 10:55AM Collector: Freeman Phone: 515-233-0000 PO Number:

Project : Landfill
Project Number: Ames ~~SEF~~ STORY CED

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
14I1126-01	MW # 28			Matrix: Water		Collected: 09/24/04 13:10	
<i>Determination of Conventional Chemistry Parameters</i>							
Chemical Oxygen Demand	17 mg/l	10	1142806	EPA 410.4	MAQ	09/28/04 14:17	
Chloride	100 mg/l	10	1142810	EPA 9252	MAQ	09/28/04 12:35	
Nitrogen, Ammonia	<1.0 mg/l	1.0	1142809	SM 4500-NH3 F	SAA	09/28/04 11:34	
Phenols, total	<0.100 mg/l	0.100	1142936	EPA 9065	SNT	09/30/04 12:33	
Total Organic Halogens (TOX)	0.030 mg/l	0.010	1J41120	EPA 9020	TVK	10/07/04 0:00	
<i>Determination of Dissolved Metals</i>							
Iron, dissolved	<0.030 mg/l	0.030	1142919	EPA 6010B	LAR	09/29/04 17:51	
14I1126-02	MW # 29			Matrix: Water		Collected: 09/24/04 14:10	
<i>Determination of Conventional Chemistry Parameters</i>							
Chemical Oxygen Demand	<10 mg/l	10	1142806	EPA 410.4	MAQ	09/28/04 14:17	
Chloride	<10 mg/l	10	1142810	EPA 9252	MAQ	09/28/04 12:35	
Nitrogen, Ammonia	<1.0 mg/l	1.0	1142809	SM 4500-NH3 F	SAA	09/28/04 11:34	
Phenols, total	<0.100 mg/l	0.100	1142936	EPA 9065	SNT	09/30/04 12:33	
Total Organic Halogens (TOX)	0.014 mg/l	0.010	1J41120	EPA 9020	TVK	10/07/04 0:00	
<i>Determination of Dissolved Metals</i>							
Iron, dissolved	0.034 mg/l	0.030	1142919	EPA 6010B	LAR	09/29/04 17:55	
14I1126-03	MW 6			Matrix: Water		Collected: 09/24/04 08:30	
<i>Determination of Conventional Chemistry Parameters</i>							
Chemical Oxygen Demand	<10 mg/l	10	1142806	EPA 410.4	MAQ	09/28/04 14:17	
Chloride	56 mg/l	10	1142810	EPA 9252	MAQ	09/28/04 12:35	
Nitrogen, Ammonia	<1.0 mg/l	1.0	1142809	SM 4500-NH3 F	SAA	09/28/04 11:34	
Phenols, total	<0.100 mg/l	0.100	1142936	EPA 9065	SNT	09/30/04 12:33	
Total Organic Halogens (TOX)	0.074 mg/l	0.010	1J41120	EPA 9020	TVK	10/07/04 0:00	
<i>Determination of Dissolved Metals</i>							
Iron, dissolved	<0.030 mg/l	0.030	1142919	EPA 6010B	LAR	09/29/04 18:08	

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MRL= Method Reporting Limit.

Fox Engineering Associates, Inc.
 1601 Golden Aspen Drive, Suite 103
 Ames, IA 50010

October 19, 2004

Page 2 of 3

Work Order: 14I1126

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
14I1126-03	MW 6			Matrix: Water		Collected: 09/24/04 08:30	
14I1126-04	MW 7			Matrix: Water		Collected: 09/24/04 09:10	
<i>Determination of Conventional Chemistry Parameters</i>							
Chemical Oxygen Demand	<10 mg/l	10	1142806	EPA 410.4	MAQ	09/28/04 14:17	
Chloride	14 mg/l	10	1142810	EPA 9252	MAQ	09/28/04 12:35	
Nitrogen, Ammonia	<1.0 mg/l	1.0	1142809	SM 4500-NH3 F	SAA	09/28/04 11:34	
Phenols, total	<0.100 mg/l	0.100	1142936	EPA 9065	SNT	09/30/04 12:33	
Total Organic Halogens (TOX)	0.013 mg/l	0.010	1141132	EPA 9020	TVK	10/08/04 0:00	
<i>Determination of Dissolved Metals</i>							
Iron, dissolved	0.267 mg/l	0.030	1142919	EPA 6010B	LAR	09/29/04 18:12	
14I1126-05	MW 8			Matrix: Water		Collected: 09/24/04 09:30	
<i>Determination of Conventional Chemistry Parameters</i>							
Chemical Oxygen Demand	10 mg/l	10	1142806	EPA 410.4	MAQ	09/28/04 14:17	
Chloride	<10 mg/l	10	1142810	EPA 9252	MAQ	09/28/04 12:35	
Nitrogen, Ammonia	<1.0 mg/l	1.0	1142809	SM 4500-NH3 F	SAA	09/28/04 11:34	
Phenols, total	<0.100 mg/l	0.100	1142936	EPA 9065	SNT	09/30/04 12:33	
Total Organic Halogens (TOX)	<0.010 mg/l	0.010	1141132	EPA 9020	TVK	10/08/04 0:00	
<i>Determination of Dissolved Metals</i>							
Iron, dissolved	4.16 mg/l	0.030	1142919	EPA 6010B	LAR	09/29/04 18:16	

Fox Engineering Associates, Inc.
1601 Golden Aspen Drive, Suite 103
Ames, IA 50010

October 19, 2004

Page 3 of 3

Work Order: 14I1126

End of Report

Jeffrey King

Keystone Laboratories, Inc.
Jeffrey King, Ph.D.
Laboratory Director

**FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT**

Site Name AMES-STORY ENVIRONMENTAL LANDFILL Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. MW-6 Upgradient ☒ Downgradient ☐

Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 942.88 Ground Elevation 940.65
Depth of Well 21.7 Inside Casing Diameter (in inches) 2.0"
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>9/23/04</u>	<u>8.6</u>	_____
*After Purging	_____	<u>12.0</u>	_____
*Before Sampling	<u>9/24/04 8:30</u>	<u>8.6</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 6
No. of Well Volumes (based on current water level) 3
Was well pumped/bailed dry? No

Equipment used: PVC
Bailer type _____ 'Dedicated Bailer ☐
Pump type _____ 'Dedicated Bailer ☐
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions cloudy 60-75°
Field Measurements (after stabilization):
Temperature 18 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 6.7
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 16.73 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

**FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT**

Site Name AMES-STORY ENVIRONMENTAL LANDFILL Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. MW-7 Upgradient ✓
Downgradient _____

Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 943.21 Ground Elevation 940.65
Depth of Well 53' Inside Casing Diameter (inches) 2.0"
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>9/23/04</u>	<u>22.7</u>	_____
*After Purging	_____	<u>51.0</u>	_____
*Before Sampling	<u>9/24/04 9:10</u>	<u>22.7</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 5
No. of Well Volumes (based on current water level) 1
Was well pumped/bailed dry? ✓ dry

Equipment used:
Bailer type OVC 'Dedicated Bailer _____
Pump type _____ 'Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions cloudy 60-75°
Field Measurements (after stabilization):
Temperature 15 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.8
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 0.22 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

**FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT**

Site Name AMES-STORY Environmental Landfill Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. MW-8 Upgradient ☒ Downgradient ☐

Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 942.76 Ground Elevation 940.65
Depth of Well 71.7 Inside Casing Diameter (inches) 2.0
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>9/23/04</u>	<u>35.20</u>	_____
*After Purging	_____	<u>49.0</u>	_____
*Before Sampling	<u>9/24/04 9:30</u>	<u>35.2</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 10
No. of Well Volumes (based on current water level) 2
Was well pumped/bailed dry? No

Equipment used: _____
Bailer type ALC Dedicated Bailer _____
Pump type _____ Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions cloudy 60-75°
Field Measurements (after stabilization):
Temperature 14 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.6
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 774 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

**FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT**

Site Name AMES-STORY Environmental LANDFILL Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. MW-23 Upgradient _____
Downgradient ✓

Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 945.98 Ground Elevation 943.62
Depth of Well 27.86 Inside Casing Diameter (inches) 2.0"
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>9/25/04</u>	<u>17.7</u>	_____
*After Purging		<u>20.6</u>	_____
*Before Sampling	<u>9/25/04 11:30</u>	<u>20.5</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 4
No. of Well Volumes (based on current water level) 2
Was well pumped/bailed dry? dry

Equipment used: PVC
Bailer type _____ 'Dedicated Bailer _____
Pump type _____ 'Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions cloudy 60-75°
Field Measurements (after stabilization):
Temperature 16 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.1
Equipment Used HACH COMPANY POCKET PAL
Specific Conductance 1398 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

**FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT**

Site Name AMES-STORY Environmental LANDFILL Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. MW-24 Upgradient _____
Downgradient ✓

Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 939.44 Ground Elevation 936.94
Depth of Well 20.6 Inside Casing Diameter (in inches) 2.0"
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>9/27/04</u>	<u>Dry</u>	_____
*After Purging	_____	_____	_____
*Before Sampling	_____	_____	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) _____
No. of Well Volumes (based on current water level) _____
Was well pumped/bailed dry? _____

Equipment used:
Bailer type _____ 'Dedicated Bailer _____
Pump type _____ 'Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions _____
Field Measurements (after stabilization):
Temperature _____ Units _____
Equipment Used HACH COMPANY POCKET PAL
pH _____
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions _____ Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT

Site Name AMES-STORY Environmental LANDFILL Permit No. 85-SDP-13-91P
Monitoring Well/Piezometer No. MW-25 Upgradient _____
Name of person sampling RICHARD FREEMAN Downgradient ☒

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 906.34 Ground Elevation 903.94
Depth of Well 19.5 Inside Casing Diameter (in inches) 2.0"
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>9/27/04</u>	<u>9.6</u>	_____
*After Purging		<u>10.0</u>	_____
*Before Sampling	<u>9/28/04 8:50am</u>	<u>9.6</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 10
No. of Well Volumes (based on current water level) 3
Was well pumped/bailed dry? No

Equipment used:
Bailer type PVC 'Dedicated Bailer _____
Pump type _____ 'Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions cloudy 60-75°
Field Measurements (after stabilization):
Temperature 15 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.0
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 1546 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT

Site Name AMES-STORY ENVIRONMENTAL LANDFILL Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. MW-28 Upgradient _____
Downgradient ✓

Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 946.02 Ground Elevation 942.55
Depth of Well 22.7 Inside Casing Diameter (inches) 2.0"
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>9/24/04</u>	<u>7.75</u>	_____
*After Purging		<u>17.0</u>	_____
*Before Sampling	<u>9/24/04 1:10</u>	<u>7.75</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 1
No. of Well Volumes (based on current water level) 3
Was well pumped/bailed dry? No

Equipment used: _____
Bailer type PVC 'Dedicated Bailer _____
Pump type _____ 'Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions cloudy 60-75°
Field Measurements (after stabilization):
Temperature 21 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.3
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 1580 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

**FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT**

Site Name AMES-STORY Environmental Landfill Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. MW-29 Upgradient _____
Downgradient ✓

Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 945.61 Ground Elevation 942.55
Depth of Well 53.5 Inside Casing Diameter (inches) 2.0"
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>9/24/04</u>	<u>13.2</u>	_____
*After Purging	_____	<u>45.0</u>	_____
*Before Sampling	<u>9/24/04 2:10</u>	<u>19.0</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 1
No. of Well Volumes (based on current water level) 1
Was well pumped/bailed dry? 24

Equipment used: _____
Bailer type AK _____
Pump type _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions cloudy 60-75°
Field Measurements (after stabilization):
Temperature 17 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.7
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 160 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT

Site Name AMES-STORY ENVIRONMENTAL LANDFILL Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. MW-30 Upgradient _____
Downgradient ✓

Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 945.54 Ground Elevation 943.62
Depth of Well 58 Inside Casing Diameter (inches) 2.0"
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>9/25/09</u>	<u>37.5</u>	_____
*After Purging		<u>53.0</u>	_____
*Before Sampling	<u>9/25/09 11:45</u>	<u>46.0</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 10
No. of Well Volumes (based on current water level) 2.5
Was well pumped/bailed dry? NO

Equipment used:
Bailer type PVC 'Dedicated Bailer _____
Pump type _____ 'Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions Cloudy 60-75°
Field Measurements (after stabilization):
Temperature 15 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.5
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 848 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

**FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT**

Site Name AMES-STORY Environmental LANDFILL Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. MW-31 Upgradient _____

Downgradient ✓

Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 941.43 Ground Elevation 938.21
Depth of Well 36 Inside Casing Diameter (in inches) 2.0
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>9/25/04</u>	<u>22.4</u>	_____
*After Purging	_____	<u>35.0</u>	_____
*Before Sampling	<u>9/25/04 12:05</u>	<u>30.0</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 5
No. of Well Volumes (based on current water level) 2
Was well pumped/bailed dry? dry

Equipment used: PVC
Bailer type _____ 'Dedicated Bailer _____
Pump type _____ 'Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions cloudy 60-75°
Field Measurements (after stabilization):
Temperature 15 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.0
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 1870 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT

Site Name AMES-STORY ENVIRONMENTAL LANDFILL Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. MW-32 Upgradient _____
Downgradient ☒

Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 939.86 Ground Elevation 937.39
Depth of Well 50.5 Inside Casing Diameter (inches) 2.0
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>9/27/04</u>	<u>34.0</u>	_____
*After Purging		<u>45.0</u>	_____
*Before Sampling	<u>9/28/04 8:30</u>	<u>34.0</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 9
No. of Well Volumes (based on current water level) 3
Was well pumped/bailed dry? No

Equipment used:
Bailer type PVC 'Dedicated Bailer _____
Pump type _____ 'Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions cloudy 60-75°
Field Measurements (after stabilization):
Temperature 12 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.0
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 1216 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

**FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT**

Site Name AMES-STORY ENVIRONMENTAL LANDFILL Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. MW-33 Upgradient _____
Downgradient ✓

Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 906.32 Ground Elevation 904.06
Depth of Well 28.2 Inside Casing Diameter (in inches) 2.0"
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>9/27/04</u>	<u>9.6</u>	_____
*After Purging		<u>10.0</u>	_____
*Before Sampling	<u>9/28/04 9:00</u>	<u>9.6</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 6
No. of Well Volumes (based on current water level) 2
Was well pumped/bailed dry? No

Equipment used: PVC
Bailer type _____ 'Dedicated Bailer _____
Pump type _____ 'Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions cloudy 60-75°
Field Measurements (after stabilization):
Temperature 15 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.1
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 130.0 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT

Site Name AMES-STORY ENVIRONMENTAL LANDFILL Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. MW-34 Upgradient _____
Downgradient ✓

Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 909.5 Ground Elevation 906.85
Depth of Well 17.3 Inside Casing Diameter (in inches) 2.0"
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>9/27/04</u>	<u>7.8</u>	_____
*After Purging		<u>14.0</u>	_____
*Before Sampling	<u>9/28/04 10:05</u>	<u>7.8</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 1
No. of Well Volumes (based on current water level) 0.6
Was well pumped/bailed dry? dry

Equipment used:
Bailer type PVC 'Dedicated Bailer _____
Pump type _____ 'Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions cloudy 66-75°
Field Measurements (after stabilization):
Temperature 18 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.2
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 12.18 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

**FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT**

Site Name AMES-STORY Environmental Landfill Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. MW-35 Upgradient _____
Downgradient ✓

Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 916.19 Ground Elevation 914.04
Depth of Well 20.6 Inside Casing Diameter (in inches) 2.0"
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>9/27/04</u>	<u>13.0</u>	_____
*After Purging	_____	<u>15.0</u>	_____
*Before Sampling	<u>9/28/04 10:15</u>	<u>13.0</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 4
No. of Well Volumes (based on current water level) 3
Was well pumped/bailed dry? No

Equipment used: _____
Bailer type PVC 'Dedicated Bailer _____
Pump type _____ 'Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions cloudy 60-75°
Field Measurements (after stabilization):
Temperature 16 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.2
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 995 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT

Site Name AMES-STORY Environmental LANDFILL Permit No. 85-SDP-13-91P
Monitoring Well/Piezometer No. MW-36 Upgradient ☒
Downgradient ☐
Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 948.97 Ground Elevation 947.30
Depth of Well 53.5 Inside Casing Diameter (inches) 2.0
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>9/23/04</u>	<u>16.5</u>	_____
*After Purging	_____	<u>45.0</u>	_____
*Before Sampling	<u>9/24/04 2:30</u>	<u>37.0</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 10
No. of Well Volumes (based on current water level) 1.7
Was well pumped/bailed dry? dry

Equipment used: _____
Bailer type PVC 'Dedicated Bailer _____
Pump type _____ 'Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions cloudy 60-75°
Field Measurements (after stabilization):
Temperature 16 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.5
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 750 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

**FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT**

Site Name AMES-STORY ENVIRONMENTAL LANDFILL Permit No. 85-SDP-13-91P
Monitoring Well/Piezometer No. MW-37 Upgradient ☒
Downgradient ☐
Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 949.49 Ground Elevation 947.43
Depth of Well 30.6 Inside Casing Diameter (in inches) 2.0"
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>9/23/04</u>	<u>8.4</u>	_____
*After Purging	<u>9/24/04</u>	<u>24.0</u>	_____
*Before Sampling	<u>9/24/04 2:40</u>	<u>8.4</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 7
No. of Well Volumes (based on current water level) 2
Was well pumped/bailed dry? No

Equipment used: PVC
Bailer type _____ 'Dedicated Bailer _____
Pump type _____ 'Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions cloudy 60-75°
Field Measurements (after stabilization):
Temperature 19 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.1
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 1819 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

**FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT**

Site Name AMES-STORY Environmental Landfill Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. MW-38 Upgradient _____

Downgradient ✓

Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 936.59 Ground Elevation 934.05
Depth of Well 25.2 Inside Casing Diameter (inches) 2.0"
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>9/23/04</u>	<u>18.68</u>	_____
*After Purging		<u>49.0</u>	_____
*Before Sampling	<u>9/24/04 9:50</u>	<u>18.7</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 6
No. of Well Volumes (based on current water level) 1
Was well pumped/bailed dry? yes

Equipment used: _____
Bailer type PVC 'Dedicated Bailer _____
Pump type _____ 'Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions cloudy 60-75°
Field Measurements (after stabilization):
Temperature 16 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.3
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 1264 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT

Site Name AMES-STORY Environmental Landfill Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. MW-39 Upgradient _____
Downgradient ✓

Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 935.93 Ground Elevation 933.96
Depth of Well 30.2 Inside Casing Diameter (in inches) 2.0"
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>9/23/04</u>	<u>16.45</u>	_____
*After Purging		<u>26.0</u>	_____
*Before Sampling	<u>9/24/04 10:10</u>	<u>16.5</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 7.5
No. of Well Volumes (based on current water level) 3
Was well pumped/bailed dry? No

Equipment used: PVC
Bailer type _____ 'Dedicated Bailer _____
Pump type _____ 'Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions cloudy 60°-75°
Field Measurements (after stabilization):
Temperature 18 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.0
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 1588 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT

Site Name AMES-STORY Environmental Landfill Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. MW-40 Upgradient _____
Downgradient ✓

Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 933.07 Ground Elevation 931.11
Depth of Well 20' Inside Casing Diameter (in inches) 2.0"
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>9/24/04</u>	<u>9.65</u>	_____
*After Purging	_____	<u>19.0</u>	_____
*Before Sampling	<u>9/29/04 12:30</u>	<u>10.0</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 4
No. of Well Volumes (based on current water level) 2
Was well pumped/bailed dry? dry

Equipment used: PVC
Bailer type _____ 'Dedicated Bailer _____
Pump type _____ 'Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions cloudy 60-75°
Field Measurements (after stabilization):
Temperature 18 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.6
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 1310 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

**FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT**

Site Name AMES-STORY ENVIRONMENTAL LANDFILL Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. MW-41 Upgradient _____

Name of person sampling RICHARD FREEMAN Downgradient /

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 933.46 Ground Elevation 931.44
Depth of Well 45.58 Inside Casing Diameter (in-inches) 2.0"
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>9/24/04</u>	<u>17.25</u>	_____
*After Purging	_____	<u>34</u>	_____
*Before Sampling	<u>9/24/04</u>	<u>21.0</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 10
No. of Well Volumes (based on current water level) 2
Was well pumped/bailed dry? No

Equipment used: PVC
Bailer type _____ 'Dedicated Bailer _____
Pump type _____ 'Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions cloudy 60-75°
Field Measurements (after stabilization):
Temperature 16 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.7
Equipment Used HACH COMPANY POCKET PAL
Specific Conductance 790 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

**FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT**

Site Name AMES-STORY Environmental Landfill Permit No. 85-SDP-13-91P
Monitoring Well/Piezometer No. MW-42 Upgradient _____
Name of person sampling RICHARD FREEMAN Downgradient ✓

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 940.64 Ground Elevation 938.58
Depth of Well 48.37 Inside Casing Diameter (in inches) 2.0"
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>9/27/04</u>	<u>20.8</u>	_____
*After Purging		<u>37.0</u>	_____
*Before Sampling	<u>9/28/04 9:25</u>	<u>20.8</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 9
No. of Well Volumes (based on current water level) 2
Was well pumped/bailed dry? No

Equipment used: PVC
Bailer type _____ 'Dedicated Bailer _____
Pump type _____ 'Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions cloudy 60-75°
Field Measurements (after stabilization):
Temperature 15 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.5
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 890 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

**FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT**

Site Name AMES-STORY Environmental LANDFILL Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. MW-43 Upgradient _____
Downgradient _____

Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 940.83 Ground Elevation 938.62
Depth of Well 28.13 Inside Casing Diameter (inches) 2.0"
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>9/27/04</u>	<u>18.8</u>	_____
*After Purging		<u>27.0</u>	_____
*Before Sampling	<u>9/28/04</u> 9:40	<u>18.8</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 3
No. of Well Volumes (based on current water level) 1.5
Was well pumped/bailed dry? dry

Equipment used:
Bailer type PVC Dedicated Bailer _____
Pump type _____ Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions cloudy 60-75°
Field Measurements (after stabilization):
Temperature 15 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 6.8
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 1254 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

FORM FOR
SURFACE WATER SAMPLING

Site Name AMES-STORY ENVIRONMENTAL LANDFILL Permit No. 85-SDP-13-91P
Monitoring Well/Piezometer No. SW-1 Date/Time 9/24/04 305pm
Name of person sampling RICHARD FREEMAN

A.) TYPE OF MONITORING POINT

Stream ✓ Open Tile _____
Road Ditch _____ Tile with Riser _____
Drainage Ditch _____ Other _____

B.) PURPOSE OF MONITORING POINT

Upstream ✓ Downstream _____
Within Landfill _____ Other _____

C.) MONITORING POINT CONDITIONS

General description/condition of monitoring point _____

Was monitoring point dry? No Too little water to sample? No
Was water flowing? yes If yes, estimate quantity good flow
If yes, estimate depth 8ft wide x 4" deep

Was water discolored? No If yes, describe below.
Does water have odor? No If yes, describe below.
Was ground discolored? No If yes, describe below.
Litter present? No If yes, describe below.

Comments _____

D.) FIELD MEASUREMENT

Weather Conditions cloudy 60-75°

Field Measurements (after stabilization):

Temperature 22 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 9.4
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 871 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

FORM FOR
SURFACE WATER SAMPLING

Site Name AMES-STORY ENVIRONMENTAL LANDFILL Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. SW-2 Date/Time 9/24/04 3:20pm

Name of person sampling RICHARD FREEMAN

A.) TYPE OF MONITORING POINT

Stream	<input checked="" type="checkbox"/>	Open Tile	_____
Road Ditch	_____	Tile with Riser	_____
Drainage Ditch	_____	Other	_____

B.) PURPOSE OF MONITORING POINT

Upstream	_____	Downstream	<input checked="" type="checkbox"/>
Within Landfill	_____	Other	_____

C.) MONITORING POINT CONDITIONS

General description/condition of monitoring point _____

Was monitoring point dry? No Too little water to sample? No
Was water flowing? yes If yes, estimate quantity Little flow
If yes, estimate depth 10ft wide x 6" deep

Was water discolored? No If yes, describe below.
Does water have odor? No If yes, describe below.
Was ground discolored? No If yes, describe below.
Litter present? No If yes, describe below.

Comments _____

D.) FIELD MEASUREMENT

Weather Conditions cloudy 60-75°

Field Measurements (after stabilization):

Temperature	<u>21</u>	Units	_____
Equipment Used	<u>HACH COMPANY POCKET PAL</u>		
pH	<u>8.4</u>	Units	_____
Equipment Used	<u>HACH COMPANY POCKET PAL</u>		
Specific Conditions	<u>TO96</u>	Units	_____
Equipment Used	<u>HACH COMPANY POCKET PAL</u>		

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

FORM FOR
SURFACE WATER SAMPLING

Site Name AMES-STORY ENVIRONMENTAL LANDFILL Permit No. 85-SDP-13-91P
Monitoring Well/Piezometer No. SW-3 Date/Time 9/29/04
Name of person sampling RICHARD FREEMAN

A.) TYPE OF MONITORING POINT

Stream	_____	Open Tile	<input checked="" type="checkbox"/>
Road Ditch	_____	Tile with Riser	_____
Drainage Ditch	_____	Other	_____

B.) PURPOSE OF MONITORING POINT

Upstream	_____	Downstream	<input checked="" type="checkbox"/>
Within Landfill	_____	Other	_____

C.) MONITORING POINT CONDITIONS

General description/condition of monitoring point _____

Was monitoring point dry? DRY Too little water to sample? _____
Was water flowing? _____ If yes, estimate quantity _____
If yes, estimate depth _____

Was water discolored?	_____	If yes, describe below.
Does water have odor?	_____	If yes, describe below.
Was ground discolored?	_____	If yes, describe below.
Litter present?	_____	If yes, describe below.

Comments _____

D.) FIELD MEASUREMENT

Weather Conditions _____

Field Measurements (after stabilization):

Temperature	_____	Units	_____
Equipment Used	<u>HACH COMPANY POCKET PAL</u>		
pH	_____	Units	_____
Equipment Used	<u>HACH COMPANY POCKET PAL</u>		
Specific Conditions	_____	Units	_____
Equipment Used	<u>HACH COMPANY POCKET PAL</u>		

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

FORM FOR
SURFACE WATER SAMPLING

Site Name AMES-STORY ENVIRONMENTAL LANDFILL Permit No. 85-SDP-13-91P
Monitoring Well/Piezometer No. SW-4 Date/Time 9/25/04
Name of person sampling RICHARD FREEMAN

A.) TYPE OF MONITORING POINT

Stream	_____	Open Tile	_____
Road Ditch	_____	Tile with Riser	_____
Drainage Ditch	<u>✓</u>	Other	_____

B.) PURPOSE OF MONITORING POINT

Upstream	<u>✓</u>	Downstream	_____
Within Landfill	_____	Other	_____

C.) MONITORING POINT CONDITIONS

General description/condition of monitoring point _____

Was monitoring point dry? DRY Too little water to sample? _____
Was water flowing? _____ If yes, estimate quantity _____
If yes, estimate depth _____

Was water discolored?	_____	If yes, describe below.
Does water have odor?	_____	If yes, describe below.
Was ground discolored?	_____	If yes, describe below.
Litter present?	_____	If yes, describe below.

Comments _____

D.) FIELD MEASUREMENT

Weather Conditions _____

Field Measurements (after stabilization):

Temperature	_____	Units	_____
Equipment Used	<u>HACH COMPANY POCKET PAL</u>		
pH	_____		
Equipment Used	<u>HACH COMPANY POCKET PAL</u>		
Specific Conditions	_____	Units	_____
Equipment Used	<u>HACH COMPANY POCKET PAL</u>		

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

FORM FOR
SURFACE WATER SAMPLING

Site Name AMES-STORY ENVIRONMENTAL LANDFILL Permit No. 85-SDP-13-91P
Monitoring Well/Piezometer No. SW-5 Date/Time 9/25/04
Name of person sampling RICHARD FREEMAN

A.) TYPE OF MONITORING POINT

Stream	_____	Open Tile	_____
Road Ditch	_____	Tile with Riser	_____
Drainage Ditch	<u>✓</u>	Other	_____

B.) PURPOSE OF MONITORING POINT

Upstream	_____	Downstream	<u>✓</u>
Within Landfill	_____	Other	_____

C.) MONITORING POINT CONDITIONS

General description/condition of monitoring point _____

Was monitoring point dry? DRY Too little water to sample? _____
Was water flowing? _____ If yes, estimate quantity _____
If yes, estimate depth _____

Was water discolored?	_____	If yes, describe below.
Does water have odor?	_____	If yes, describe below.
Was ground discolored?	_____	If yes, describe below.
Litter present?	_____	If yes, describe below.

Comments _____

D.) FIELD MEASUREMENT

Weather Conditions _____

Field Measurements (after stabilization):

Temperature	_____	Units	_____
Equipment Used	<u>HACH COMPANY POCKET PAL</u>		
pH	_____		
Equipment Used	<u>HACH COMPANY POCKET PAL</u>		
Specific Conditions	_____	Units	_____
Equipment Used	<u>HACH COMPANY POCKET PAL</u>		

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

FORM FOR
SURFACE WATER SAMPLING

Site Name AMES-STORY ENVIRONMENTAL LANDFILL Permit No. 85-SDP-13-91P
Monitoring Well/Piezometer No. SW-6 Date/Time 9/25/04 12:45
Name of person sampling RICHARD FREEMAN

A.) TYPE OF MONITORING POINT

Stream _____ Open Tile ✓
Road Ditch _____ Tile with Riser _____
Drainage Ditch _____ Other _____

B.) PURPOSE OF MONITORING POINT

Upstream _____ Downstream ✓
Within Landfill _____ Other _____

C.) MONITORING POINT CONDITIONS

General description/condition of monitoring point _____

Was monitoring point dry? No Too little water to sample? No
Was water flowing? yes If yes, estimate quantity slight flow
If yes, estimate depth 4" PVC pipe flow

Was water discolored? No If yes, describe below.
Does water have odor? No If yes, describe below.
Was ground discolored? yes If yes, describe below.
Litter present? No If yes, describe below.

Comments _____

D.) FIELD MEASUREMENT

Weather Conditions cloudy 60-75°

Field Measurements (after stabilization):

Temperature 21 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.0
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 1400 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

AMES-STORY ENVIRONMENTAL LANDFILL
85-SDP-13-91P
MONITORING WELL SAMPLING RESULTS

NORTH TRENCHES

SAMPLING DATE: March 8, 2004																	
ACTION		U.G.W	U.G.W	U.A.W	U.A.W	D.G.W	D.G.W	D.G.W	D.G.W	D.A.W	D.A.W	BOTH	BOTH	BOTH	SURFACE MONITORING PTS.		
PARAMETER	LEVEL	MW 22	MW 28	MW 27	MW 29	MW 23	MW 24	MW 26	MW 31	MW 30	MW 32	MW 25	MW 33	MW 34	SW 1	SW 2	SW 3
ug/L																	
Benzene *	5	Plugged	NT	Plugged	NT	NT	NT	Plugged	NT	NT	NT	NT	NT	NT	NT	NT	dry
Carbon tetrachloride *	5	Plugged	NT	Plugged	NT	NT	NT	Plugged	NT	NT	NT	NT	NT	NT	NT	NT	dry
1,4-Dichlorobenzene *	75	Plugged	NT	Plugged	NT	NT	NT	Plugged	NT	NT	NT	NT	NT	NT	NT	NT	dry
1,2-Dichloroethane *	5	Plugged	NT	Plugged	NT	NT	NT	Plugged	NT	NT	NT	NT	NT	NT	NT	NT	dry
1,1-Dichloroethene *	7	Plugged	NT	Plugged	NT	NT	NT	Plugged	NT	NT	NT	NT	NT	NT	NT	NT	dry
1,1,1-Trichloroethane *	200	Plugged	NT	Plugged	NT	NT	NT	Plugged	NT	NT	NT	NT	NT	NT	NT	NT	dry
Trichloroethene *	5	Plugged	NT	Plugged	NT	NT	NT	Plugged	NT	NT	NT	NT	NT	NT	NT	NT	dry
mg/L																	
Arsenic, dissolved	0.05	Plugged	NT	Plugged	NT	NT	NT	Plugged	NT	NT	NT	NT	NT	NT	NT	NT	dry
Barium, dissolved	2.0	Plugged	NT	Plugged	NT	NT	NT	Plugged	NT	NT	NT	NT	NT	NT	NT	NT	dry
Cadmium, dissolved	0.005	Plugged	NT	Plugged	NT	NT	NT	Plugged	NT	NT	NT	NT	NT	NT	NT	NT	dry
Chromium, dissolved	0.1	Plugged	NT	Plugged	NT	NT	NT	Plugged	NT	NT	NT	NT	NT	NT	NT	NT	dry
Lead, dissolved	0.015	Plugged	NT	Plugged	NT	NT	NT	Plugged	NT	NT	NT	NT	NT	NT	NT	NT	dry
Mercury, dissolved	0.002	Plugged	NT	Plugged	NT	NT	NT	Plugged	NT	NT	NT	NT	NT	NT	NT	NT	dry
Magnesium, dissolved	--	Plugged	NT	Plugged	NT	NT	NT	Plugged	NT	NT	NT	NT	NT	NT	NT	NT	dry
Zinc, dissolved	2	Plugged	NT	Plugged	NT	NT	NT	Plugged	NT	NT	NT	NT	NT	NT	NT	NT	dry
Iron, dissolved	--	Plugged	<0.03	Plugged	<0.03	0.033	<0.03	Plugged	0.463	<0.03	<0.03	0.121	7.99	0.231	0.038	<0.030	dry
Copper, dissolved	1.3	Plugged	NT	Plugged	NT	NT	NT	Plugged	NT	NT	NT	NT	NT	NT	NT	NT	dry
Chloride	--	Plugged	143	Plugged	<10	14	25	Plugged	50	<10	19	197	45	43	192	195	dry
Nitrogen, Ammonia	--	Plugged	<1	Plugged	<1.0	<1.0	<1.0	Plugged	<1.0	<1.0	<1.0	<1.0	2	<1.0	<1.0	<1.0	dry
Chemical Oxygen Demand	--	Plugged	17	Plugged	<10	18	12	Plugged	29	<10	<10	<10	17	36	16	18	dry
Total Organic Halogens	--	Plugged	NT	Plugged	NT	NT	NT	Plugged	NT	NT	NT	NT	NT	NT	NT	NT	dry
Phenols	--	Plugged	NT	Plugged	NT	NT	NT	Plugged	NT	NT	NT	NT	NT	NT	NT	NT	dry
pH	--	Plugged	7.5	Plugged	7.5	7.4	7.1	Plugged	7.4	6.8	7	7.6	7.4	7.4	6.2	7.4	dry
Temperature, celsius	--	Plugged	6	Plugged	10	11	10	Plugged	12	12	11	9	12	7	5	5	dry
Conductivity, mv	--	Plugged	1294	Plugged	787	1460	1138	Plugged	1947	886	1256	1360	1154	1237	1017	1025	dry

U.A.W - Upgradient aquifer well

NT - Not tested

D.G.W. - Downgradient groundwater well

D.A.W. - Downgradient aquifer well

U.G.W - Upgradient groundwater well

AMES-STORY ENVIRONMENTAL LANDFILL
85-SDP-13-91P
MONITORING WELL SAMPLING RESULTS

SOUTH TRENCHES

SAMPLING DATE: March 8, 2004																		
ACTION				BOTH	U.A.W	U.G.W	D.G.W	D.A.W	D.A.W	D.A.W	D.G.W	D.G.W	D.A.W	D.A.W	D.G.W	SURFACE MONITORING PTS.		
PARAMETER	LEVEL	FIELD	TRIP	MW 35	MW 36	MW37	MW 6	MW 7	MW 8	MW 38	MW 39	MW 40	MW 41	MW 42	MW 43	SW 4	SW 5	SW 6
ug/L																		
Benzene *	5	NT	<1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	<1	NT
Carbon tetrachloride *	5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	<0.3	NT
1,4-Dichlorobenzene *	75	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	<1	NT
1,2-Dichloroethane *	5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	<0.4	NT
1,1-Dichloroethene *	7	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	<1	NT
1,1,1-Trichloroethane *	200	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	<1	NT
Trichloroethene *	5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	<1	NT
mg/L																		
Arsenic, dissolved	0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	0.002	NT
Barium, dissolved	2.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	0.096	NT
Cadmium, dissolved	0.005	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	<0.001	NT
Chromium, dissolved	0.1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	<0.005	NT
Lead, dissolved	0.015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	<0.005	NT
Mercury, dissolved	0.002	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	<0.0005	NT
Magnesium, dissolved	--	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	24.6	NT
Zinc, dissolved	2	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	0.01	NT
Iron, dissolved	--	NT	NT	0.109	0.073	5.52	<0.030	0.128	3.82	2.19	3.46	<0.030	2.23	3.1	<0.030	0.032	<0.03	4.07
Copper, dissolved	1.3	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	0.005	NT
Chloride	--	NT	NT	149	<10	13	71	14	34	31	42	47	<10	15	94	136	36	73
Nitrogen, Ammonia	--	NT	NT	<1.0	<1.0	<1.0	<1.0	<1.0	1.3	<1.0	<1	<1.0	<1.0	<1	4.6	151	1.7	1.1
Chemical Oxygen Demand	--	NT	NT	<10	<10	20	<10	<10	<10	<10	<10	<10	<10	<10	18	75	30	30
Total Organic Halogens	--	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Phenols	--	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
pH	--	NT	NT	7.4	7	7.1	7.1	7.1	7.7	7.1	7.1	7.5	7	7.7	8.2	6.9	7.5	7.8
Temperature, celsius	--	NT	NT	5	12	11	7	12	12	12	12	8	10	14	13	5	4	15
Conductivity, mv	--	NT	NT	1124	647	1647	1225	704	709	1142	1446	955	764	820	1192	3622	886	1475

Accreditations:
Iowa DNR: 095
New Jersey DEP: IA001
Kansas DHE: E-10287

ANALYTICAL REPORT

March 19, 2004

Work Order: 14C0388

Page 1 of 2

Report To:
Todd Whipple
Fox Engineering Associates, Inc.
1601 Golden Aspen Drive, Suite 103
Ames, IA 50010

Work Order Information:
Date Received: 03/09/2004 10:00AM
Collector: Orr, Steve
Phone: 515-233-0000
PO Number:

Project: Landfill
Project Number: 6004-99A.950

Analyte	Result	MRL	Method	Analyst	Analyzed	Qualifier
14C0388-01 MW-30			Matrix: Water		Collected: 03/08/04 12:22	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	<10 mg/l	10	EPA 410.4	LKM	03/12/04 11:28	
Chloride	<10 mg/l	10	EPA 9252	SAA	03/12/04 16:01	
Nitrogen, Ammonia	<1.0 mg/l	1.0	SM 4500-NH3 F	SAA	03/12/04 10:45	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	<0.030 mg/l	0.030	EPA 6010B	LAR	03/15/04 17:20	
14C0388-02 MW-42			Matrix: Water		Collected: 03/08/04 13:53	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	<10 mg/l	10	EPA 410.4	LKM	03/12/04 11:28	
Chloride	15 mg/l	10	EPA 9252	SAA	03/12/04 16:01	
Nitrogen, Ammonia	<1.0 mg/l	1.0	SM 4500-NH3 F	SAA	03/12/04 10:45	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	3.10 mg/l	0.030	EPA 6010B	LAR	03/11/04 16:18	
14C0388-03 MW-43			Matrix: Water		Collected: 03/08/04 14:40	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	18 mg/l	10	EPA 410.4	LKM	03/12/04 11:28	
Chloride	94 mg/l	10	EPA 9252	SAA	03/12/04 16:01	
Nitrogen, Ammonia	4.6 mg/l	1.0	SM 4500-NH3 F	SAA	03/12/04 10:45	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	<0.030 mg/l	0.030	EPA 6010B	LAR	03/11/04 16:18	
14C0388-04 MW-24			Matrix: Water		Collected: 03/08/04 15:52	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	12 mg/l	10	EPA 410.4	LKM	03/12/04 11:28	
Chloride	25 mg/l	10	EPA 9252	SAA	03/12/04 16:01	
Nitrogen, Ammonia	<1.0 mg/l	1.0	SM 4500-NH3 F	SAA	03/12/04 10:45	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	<0.030 mg/l	0.030	EPA 6010B	LAR	03/11/04 16:18	

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MRL= Method Reporting Limit.

Fox Engineering Associates, Inc.
1601 Golden Aspen Drive, Suite 103
Ames, IA 50010

March 19, 2004

Work Order: 14C0388

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Analyte	Result	MRL	Method	Analyst	Analyzed	Qualifier
14C0388-04	MW-24		Matrix: Water		Collected: 03/08/04 15:52	
14C0388-05	MW-32		Matrix: Water		Collected: 03/08/04 16:34	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	<10 mg/l	10	EPA 410.4	LKM	03/12/04 11:28	
Chloride	19 mg/l	10	EPA 9252	SAA	03/12/04 16:01	
Nitrogen, Ammonia	<1.0 mg/l	1.0	SM 4500-NH3 F	SAA	03/12/04 10:45	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	<0.030 mg/l	0.030	EPA 6010B	LAR	03/11/04 16:18	

End of Report

Jeffrey King

Keystone Laboratories, Inc.
Jeffrey King, Ph.D.
Laboratory Director

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Keystone

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(If Applicable)

10

LABORATORY
SAMPLE
NUMBER

一一一

Contact Lab Prior to Submission

Metals Samples Field Filtered

FORM: CCR 7-97

Accreditations:
Iowa DNR: 095
New Jersey DEP: 1A001
Kansas DHE: E-10287

ANALYTICAL REPORT

March 15, 2004

Work Order: 14C0341

Page 1 of 2

Report To:
Todd Whipple
Fox Engineering Associates, Inc.
1601 Golden Aspen Drive, Suite 103
Ames, IA 50010

Work Order Information
Date Received: 03/08/2004 10:15AM
Collector: Orr, Steve
Phone: 515-233-0000
PO Number:

Project: Landfill
Project Number: 6004-99A.950

Analyte	Result	MRL	Method	Analyst	Analyzed	Qualifier
14C0341-01 MW-35			Matrix: Water		Collected: 03/07/04 11:34	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	<10 mg/l	10	EPA 410.4	LKM	03/12/04 11:28	
Chloride	149 mg/l	10	EPA 9252	SAA	03/12/04 16:01	
Nitrogen, Ammonia	<1.0 mg/l	1.0	SM 4500-NH3 F	SAA	03/09/04 14:57	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	0.109 mg/l	0.030	EPA 6010B	LAR	03/08/04 17:11	
14C0341-02 MW-34			Matrix: Water		Collected: 03/07/04 12:31	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	36 mg/l	10	EPA 410.4	LKM	03/12/04 11:28	
Chloride	43 mg/l	10	EPA 9252	SAA	03/12/04 16:01	
Nitrogen, Ammonia	<1.0 mg/l	1.0	SM 4500-NH3 F	SAA	03/12/04 10:45	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	0.231 mg/l	0.030	EPA 6010B	LAR	03/08/04 17:11	
14C0341-03 MW-33			Matrix: Water		Collected: 03/07/04 13:28	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	17 mg/l	10	EPA 410.4	LKM	03/12/04 11:28	
Chloride	45 mg/l	10	EPA 9252	SAA	03/12/04 16:01	
Nitrogen, Ammonia	2.0 mg/l	1.0	SM 4500-NH3 F	SAA	03/12/04 10:45	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	7.99 mg/l	0.030	EPA 6010B	LAR	03/08/04 17:11	
14C0341-04 MW-25			Matrix: Water		Collected: 03/07/04 14:13	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	<10 mg/l	10	EPA 410.4	LKM	03/12/04 11:28	
Chloride	197 mg/l	10	EPA 9252	SAA	03/12/04 16:01	
Nitrogen, Ammonia	<1.0 mg/l	1.0	SM 4500-NH3 F	SAA	03/12/04 10:45	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	0.121 mg/l	0.030	EPA 6010B	LAR	03/08/04 17:11	

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MRL = Method Reporting Limit.

Fox Engineering Associates, Inc.
1601 Golden Aspen Drive, Suite 103
Ames, IA 50010

March 15, 2004

Work Order: 14C0341

Page 2 of 2

Analyte	Result	MRL	Method	Analyst	Analyzed	Qualifier
14C0341-05	MW-31		Matrix: Water		Collected: 03/07/04 16:26	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	29 mg/l	10	EPA 410.4	LKM	03/12/04 11:28	
Chloride	50 mg/l	10	EPA 9252	SAA	03/12/04 16:01	
Nitrogen, Ammonia	<1.0 mg/l	1.0	SM 4500-NH3 F	SAA	03/12/04 10:45	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	0.463 mg/l	0.030	EPA 6010B	LAR	03/08/04 17:11	
14C0341-06	MW-23		Matrix: Water		Collected: 03/07/04 17:29	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	18 mg/l	10	EPA 410.4	LKM	03/12/04 11:28	
Chloride	14 mg/l	10	EPA 9252	SAA	03/12/04 16:01	
Nitrogen, Ammonia	<1.0 mg/l	1.0	SM 4500-NH3 F	SAA	03/12/04 10:45	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	0.033 mg/l	0.030	EPA 6010B	LAR	03/08/04 17:11	

End of Report



Keystone Laboratories, Inc.
Jeffrey King, Ph.D.
Laboratory Director

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FORM: CCR 7-97

Accreditations:
Iowa DNR: 095
New Jersey DEP: IA001
Kansas DHE: E-10287

ANALYTICAL REPORT

March 09, 2004

Work Order: 14C0312

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Report To

Todd Whipple
Fox Engineering Associates, Inc.
1601 Golden Aspen Drive, Suite 103
Ames, IA 50010

Work Order Information

Date Received: 03/05/2004 9:40AM
Collector: Orr, Steve
Phone: 515-233-0000
PO Number:

Project: Landfill *Ames C&D*
Project Number: 6001-03A.950

Analyte	Result	MRL	Method	Analyst	Analyzed	Qualifier
14C0312-01	MW-4 / MW 28		Matrix: Water		Collected: 03/04/04 13:20	
<i>Determination of Conventional Chemistry Parameters</i>						
Nitrogen, Ammonia	<1.0 mg/l	1.0	SM 4500-NH3 F	SAA	03/09/04 14:57	
Chemical Oxygen Demand	17 mg/l	10	EPA 410.4	SAA	03/09/04 8:25	
Chloride	143 mg/l	10	EPA 9252	SAA	03/08/04 17:07	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	<0.030 mg/l	0.030	EPA 6010B	LAR	03/08/04 16:19	
14C0312-02	MW-5 / MW 29		Matrix: Water		Collected: 03/04/04 14:35	
<i>Determination of Conventional Chemistry Parameters</i>						
Nitrogen, Ammonia	<1.0 mg/l	1.0	SM 4500-NH3 F	SAA	03/09/04 14:57	
Chemical Oxygen Demand	<10 mg/l	10	EPA 410.4	SAA	03/09/04 8:25	
Chloride	<100 mg/l	100	EPA 9252	SAA	03/08/04 17:07	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	<0.030 mg/l	0.030	EPA 6010B	LAR	03/08/04 16:19	

End of Report

Jeffrey King

Keystone Laboratories, Inc.
Jeffrey King, Ph.D.
Laboratory Director

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Accreditations:
Iowa DNR: 095
New Jersey DEP: 1A001
Kansas DHE: E-10287

ANALYTICAL REPORT

March 19, 2004

Work Order: 14C0649

Page 1 of 3

Report To
Todd Whipple
Fox Engineering Associates, Inc.
1601 Golden Aspen Drive, Suite 103
Ames, IA 50010

Work Order Information
Date Received: 03/15/2004 10:45AM
Collector: Orr, Steve
Phone: 515-233-0000
PO Number:

Project: Landfill *Ames C & D*
Project Number: 6001.03A.950

Analyte	Result	MRL	Method	Analyst	Analyzed	Qualifier
14C0649-01 MW-8			Matrix: Water		Collected: 03/10/04 10:22	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	<10 mg/l	10	EPA 410.4	RVV	03/17/04 10:55	
Chloride	34 mg/l	10	EPA 9252	SAA	03/17/04 15:55	
Nitrogen, Ammonia	1.3 mg/l	1.0	SM 4500-NH3 F	SAA	03/17/04 10:58	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	3.82 mg/l	0.030	EPA 6010B	LAR	03/17/04 16:57	
14C0649-02 MW-7			Matrix: Water		Collected: 03/10/04 11:05	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	<10 mg/l	10	EPA 410.4	RVV	03/17/04 10:55	
Chloride	14 mg/l	10	EPA 9252	SAA	03/17/04 15:55	
Nitrogen, Ammonia	<1.0 mg/l	1.0	SM 4500-NH3 F	SAA	03/17/04 10:58	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	0.128 mg/l	0.030	EPA 6010B	LAR	03/17/04 16:57	
14C0649-03 MW-6			Matrix: Water		Collected: 03/10/04 12:15	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	<10 mg/l	10	EPA 410.4	RVV	03/17/04 10:55	
Chloride	71 mg/l	10	EPA 9252	SAA	03/17/04 15:55	
Nitrogen, Ammonia	<1.0 mg/l	1.0	SM 4500-NH3 F	SAA	03/17/04 10:58	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	<0.030 mg/l	0.030	EPA 6010B	LAR	03/17/04 16:57	
14C0649-04 MW-17			Matrix: Water		Collected: 03/13/04 14:06	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	<10 mg/l	10	EPA 410.4	RVV	03/17/04 10:55	
Chloride	49 mg/l	10	EPA 9252	SAA	03/17/04 15:55	
Nitrogen, Ammonia	<1.0 mg/l	1.0	SM 4500-NH3 F	SAA	03/17/04 10:58	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	1.06 mg/l	0.030	EPA 6010B	LAR	03/17/04 16:57	

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Accreditations:
Iowa DNR: 095
New Jersey DEP: IA001
Kansas DHE: E-10287

ANALYTICAL REPORT

March 18, 2004

Work Order: 14C0254

Page 1 of 3

Report To:
Todd Whipple
Fox Engineering Associates, Inc.
1601 Golden Aspen Drive, Suite 103
Ames, IA 50010

Work Order Information:
Date Received: 03/04/2004 10:00AM
Collector: Orr, Steve
Phone: 515-233-0000
PO Number:

Project: Landfill
Project Number: 6004-99A,950

Analyte	Result	MRL	Method	Analyst	Analyzed	Qualifier
14C0254-01 SW-6			Matrix: Water		Collected: 03/02/04 12:43	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	30 mg/l	10	EPA 410.4	SAA	03/09/04 8:25	
Chloride	73 mg/l	20	EPA 9252	SAA	03/08/04 17:07	
Nitrogen, Ammonia	1.1 mg/l	1.0	SM 4500-NH3 F	SAA	03/09/04 14:57	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	4.07 mg/l	0.030	EPA 6010B	LAR	03/08/04 16:19	
14C0254-02 SW-5			Matrix: Water		Collected: 03/02/04 13:24	
<i>Determination of Volatile Organic Compounds</i>						
1,1-Dichloroethylene	<1.0 ug/l	1.0	EPA 8260B	TVK	03/09/04 2:37	
1,1,1-Trichloroethane	<1.0 ug/l	1.0	EPA 8260B	TVK	03/09/04 2:37	
Carbon Tetrachloride	<0.3 ug/l	0.3	EPA 8260B	TVK	03/09/04 2:37	
Benzene	<1.0 ug/l	1.0	EPA 8260B	TVK	03/09/04 2:37	
1,2-Dichloroethane	<0.4 ug/l	0.4	EPA 8260B	TVK	03/09/04 2:37	
Trichloroethylene	<1.0 ug/l	1.0	EPA 8260B	TVK	03/09/04 2:37	
1,4-Dichlorobenzene	<1.0 ug/l	1.0	EPA 8260B	TVK	03/09/04 2:37	
Surrogate: Dibromofluoromethane	106 %		81-122	TVK	03/09/04 2:37	
Surrogate: 1,2-Dichloroethane-d4	104 %		76-121	TVK	03/09/04 2:37	
Surrogate: Toluene-d8	103 %		79-121	TVK	03/09/04 2:37	
Surrogate: 4-Bromofluorobenzene	98.9 %		82-122	TVK	03/09/04 2:37	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	30 mg/l	10	EPA 410.4	SAA	03/09/04 8:25	
Chloride	36 mg/l	20	EPA 9252	SAA	03/08/04 17:07	
Nitrogen, Ammonia	1.7 mg/l	1.0	SM 4500-NH3 F	SAA	03/09/04 14:57	
<i>Determination of Dissolved Metals</i>						
Arsenic, dissolved	0.002 mg/l	0.001	EPA 7060A	LAR	03/11/04 14:53	
Barium, dissolved	0.096 mg/l	0.010	EPA 6010B	RVV	03/12/04 12:15	
Cadmium, dissolved	<0.00100 mg/l	0.00100	EPA 7131A	LAR	03/10/04 17:42	
Chromium, dissolved	<0.005 mg/l	0.005	EPA 6010B	RVV	03/12/04 12:15	
Copper, dissolved	0.005 mg/l	0.005	EPA 6010B	RVV	03/12/04 12:15	

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MRL= Method Reporting Limit.

Fox Engineering Associates, Inc.
1601 Golden Aspen Drive, Suite 103
Ames, IA 50010

March 18, 2004

Page 2 of 3

Work Order: 14C0254

Analyte	Result	MRL	Method	Analyst	Analyzed	Qualifier
14C0254-02 SW-5			Matrix: Water		Collected: 03/02/04 13:24	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	<0.030 mg/l	0.030	EPA 6010B	LAR	03/08/04 16:19	
Lead, dissolved	<0.005 mg/l	0.005	EPA 6010B	RVV	03/12/04 12:15	
Magnesium, dissolved	24.6 mg/l	0.10	EPA 6010B	RVV	03/12/04 12:15	
Mercury, dissolved	<0.00050 mg/l	0.00050	EPA 7470A	LKM	03/16/04 13:46	
Zinc, dissolved	0.010 mg/l	0.010	EPA 6010B	RVV	03/12/04 12:15	
14C0254-03 SW-4			Matrix: Water		Collected: 03/02/04 14:12	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	75 mg/l	10	EPA 410.4	SAA	03/09/04 8:25	
Chloride	136 mg/l	20	EPA 9252	SAA	03/08/04 17:07	
Nitrogen, Ammonia	151 mg/l	4.0	SM 4500-NH3 F	SAA	03/09/04 14:57	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	0.032 mg/l	0.030	EPA 6010B	LAR	03/08/04 16:19	
14C0254-04 SW-1			Matrix: Water		Collected: 03/02/04 14:48	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	16 mg/l	10	EPA 410.4	SAA	03/09/04 8:25	
Chloride	192 mg/l	50	EPA 9252	SAA	03/08/04 17:07	
Nitrogen, Ammonia	<1.0 mg/l	1.0	SM 4500-NH3 F	SAA	03/09/04 14:57	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	0.038 mg/l	0.030	EPA 6010B	LAR	03/08/04 16:19	
14C0254-05 SW-2			Matrix: Water		Collected: 03/02/04 15:25	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	18 mg/l	10	EPA 410.4	SAA	03/09/04 8:25	
Chloride	195 mg/l	50	EPA 9252	SAA	03/08/04 17:07	
Nitrogen, Ammonia	<1.0 mg/l	1.0	SM 4500-NH3 F	SAA	03/09/04 14:57	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	<0.030 mg/l	0.030	EPA 6010B	LAR	03/08/04 16:19	

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Fox Engineering Associates, Inc.
1601 Golden Aspen Drive, Suite 103
Ames, IA 50010

March 18, 2004

Work Order: 14C0254

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End of Report

Jeffrey King

Keystone Laboratories, Inc.
Jeffrey King, Ph.D.
Laboratory Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. MRL= Method Reporting Limit.

Accreditations:
Iowa DNR: 095
New Jersey DEP: 1A001
Kansas DHE: E-10287

ANALYTICAL REPORT

March 19, 2004

Work Order: 14C0650

Page 1 of 2

Report To
Todd Whipple
Fox Engineering Associates, Inc.
1601 Golden Aspen Drive, Suite 103
Ames, IA 50010

Work Order Information
Date Received: 03/15/2004 10:45AM
Collector: Orr, Steve
Phone: 515-233-0000
PO Number:

Project: Landfill
Project Number: 6004-99A.950

Analyte	Result	MRL	Method	Analyst	Analyzed	Qualifier
14C0650-01 MW-36			Matrix: Water		Collected: 03/10/04 14:00	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	<10 mg/l	10	EPA 410.4	RVV	03/17/04 10:55	
Chloride	<10 mg/l	10	EPA 9252	SAA	03/17/04 15:55	
Nitrogen, Ammonia	<1.0 mg/l	1.0	SM 4500-NH3 F	SNT	03/18/04 11:50	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	0.073 mg/l	0.030	EPA 6010B	LAR	03/17/04 16:57	
14C0650-02 MW-37			Matrix: Water		Collected: 03/10/04 14:47	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	20 mg/l	10	EPA 410.4	SAA	03/17/04 16:24	
Chloride	13 mg/l	10	EPA 9252	SAA	03/17/04 15:55	
Nitrogen, Ammonia	<1.0 mg/l	1.0	SM 4500-NH3 F	SNT	03/18/04 11:50	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	5.52 mg/l	0.030	EPA 6010B	LAR	03/17/04 16:57	
14C0650-03 MW-40			Matrix: Water		Collected: 03/11/04 12:05	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	<10 mg/l	10	EPA 410.4	SAA	03/17/04 16:24	
Chloride	47 mg/l	10	EPA 9252	SAA	03/17/04 15:55	
Nitrogen, Ammonia	<1.0 mg/l	1.0	SM 4500-NH3 F	SNT	03/18/04 11:50	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	<0.030 mg/l	0.030	EPA 6010B	LAR	03/17/04 16:57	
14C0650-04 MW-41			Matrix: Water		Collected: 03/11/04 12:55	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	<10 mg/l	10	EPA 410.4	SAA	03/17/04 16:24	
Chloride	<10 mg/l	10	EPA 9252	SAA	03/17/04 15:55	
Nitrogen, Ammonia	<1.0 mg/l	1.0	SM 4500-NH3 F	SNT	03/18/04 11:50	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	2.23 mg/l	0.030	EPA 6010B	LAR	03/17/04 16:57	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted.
MRL= Method Reporting Limit.

Fox Engineering Associates, Inc.
1601 Golden Aspen Drive, Suite 103
Ames, IA 50010

March 19, 2004

Work Order: 14C0650

Page 2 of 2

Analyte	Result	MRL	Method	Analyst	Analyzed	Qualifier
14C0650-04	MW-41		Matrix: Water		Collected: 03/11/04 12:55	
14C0650-05	MW-38		Matrix: Water		Collected: 03/13/04 12:25	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	<10 mg/l	10	EPA 410.4	SAA	03/17/04 16:24	
Chloride	31 mg/l	10	EPA 9252	SAA	03/17/04 15:55	
Nitrogen, Ammonia	<1.0 mg/l	1.0	SM 4500-NH3 F	SNT	03/18/04 11:50	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	2.19 mg/l	0.030	EPA 6010B	LAR	03/17/04 16:57	
14C0650-06	MW39		Matrix: Water		Collected: 03/13/04 12:54	
<i>Determination of Conventional Chemistry Parameters</i>						
Chemical Oxygen Demand	<10 mg/l	10	EPA 410.4	SAA	03/17/04 16:24	
Chloride	42 mg/l	10	EPA 9252	SAA	03/17/04 15:55	
Nitrogen, Ammonia	<1.0 mg/l	1.0	SM 4500-NH3 F	SNT	03/18/04 11:50	
<i>Determination of Dissolved Metals</i>						
Iron, dissolved	3.46 mg/l	0.030	EPA 6010B	LAR	03/17/04 16:57	
14C0650-07	Trip Blank 2/17/04 JRF 9:00		Matrix: Water		Collected: 03/10/04 00:00	
<i>Determination of Volatile Organic Compounds</i>						
Benzene	<1.0 ug/l	1.0	EPA 8260B	TVK	03/16/04 22:57	
Surrogate: Dibromofluoromethane	103 %		81-122	TVK	03/16/04 22:57	
Surrogate: 1,2-Dichloroethane-d4	97.4 %		76-121	TVK	03/16/04 22:57	
Surrogate: Toluene-d8	105 %		79-121	TVK	03/16/04 22:57	
Surrogate: 4-Bromofluorobenzene	100 %		82-122	TVK	03/16/04 22:57	

End of Report

Jeffrey King

Keystone Laboratories, Inc.
Jeffrey King, Ph.D.
Laboratory Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. MRL= Method Reporting Limit.



LABORATORIES, INC.

☐ 600 E. 17th St. S.
Newton, IA 50208
Phone: 641-792-8451
Fax: 641-792-7989

☐ 3012 Ansbrough Ave.
Waterloo, IA 50701
Phone: 319-235-4440
Fax: 319-235-2480

☐ 1304 Adams
Kansas City, KS 66103
Phone: 913-321-7856
Fax: 913-321-7937

PAGE 1 OF 1

PRINT OR TYPE INFORMATION BELOW

SAMPLER: Steve Orr
SITE NAME: 6004-98A, 950
ADDRESS: _____
CITY/ST/ZIP: Ames, IA 50010
PHONE: _____

REPORT TO: Todd Whipple CPC
NAME: _____
COMPANY NAME: For Engineering
ADDRESS: 1601 Golden Apple Dr, Suite 103
CITY/ST/ZIP: Ames, IA 50010
PHONE: 800 433 3469
FAX: 515 233 0103

BILL TO: Mr Bill Fedeler
NAME: _____
COMPANY NAME: _____
ADDRESS: PO Box 2483
CITY/ST/ZIP: Ames, IA 50010
PHONE: _____
KeyStone Quote No.: _____
(If Applicable)

CLIENT SAMPLE NUMBER	DATE	TIME	SAMPLE LOCATION	NO. OF CONTAINERS	MATRIX	GRAB/COMPOSITE	ANALYSES REQUIRED	LABORATORY SAMPLE NUMBER
MW 36	3-10-04	14:00	MW 36	3	W	G	X	-01
MW 37	3-10-04	14:42	MW 37	3	W	G	X	02
MW 40	3-10-04	12:05	MW 40	3	W	G	X	03
MW 41	3-10-04	12:55	MW 41	3	W	G	X	04
MW 38	3-13-04	12:25	MW 38	3	W	G	X	05
MW 39	3-13-04	12:54	MW 39	3	W	G	X	06
Two Blank	3-17-04	9:00	by JRF	2	W		X	07

Relinquished by: (Signature)

Date 3-13-04

Received by: (Signature)

Date

Turn-Around: ☒ Standard

☐ Rush

Contact Lab Prior to Submission

Relinquished by: (Signature)

Date

Received for Lab by: (Signature)

Date

Remarks:

Metals Samples Field Filtered

**FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT**

Site Name AMES-STORY Environmental LANDFILL Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. MW-6 Upgradient ☒ Downgradient ☐

Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 942.88 Ground Elevation 940.65
Depth of Well 21.7 Inside Casing Diameter (inches) 2.0"
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>3/10/04</u>	<u>8.27</u>	_____
*After Purging		<u>13.50</u>	_____
*Before Sampling	<u>3/10/04 12:15</u>	<u>8.72</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 6.75
No. of Well Volumes (based on current water level) 3
Was well pumped/bailed dry? No

Equipment used:
Bailer type PVC 'Dedicated Bailer _____
Pump type _____ 'Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions clear 30°'s
Field Measurements (after stabilization):
Temperature 7 - _____ Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.1
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 1225 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

**FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT**

Site Name AMES-STORY Environmental Landfill Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. MW-7 Upgradient ☒ Downgradient ☐

Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 943.21 Ground Elevation 940.65
Depth of Well 53' Inside Casing Diameter (in inches) 2.0"
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>3/10/04</u>	<u>23.05</u>	_____
*After Purging	_____	<u>50.09</u>	_____
*Before Sampling	<u>3/10/04 11:06</u>	<u>49.68</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 4.5
No. of Well Volumes (based on current water level) 1
Was well pumped/bailed dry? yes

Equipment used:
Bailer type PVC 'Dedicated Bailer ☐
Pump type _____ 'Dedicated Bailer ☐
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions clear 30°'s
Field Measurements (after stabilization):
Temperature 12 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.1
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 704 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

**FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT**

Site Name AMES-STORY Environmental LANDFILL Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. MW-8 Upgradient ☒ Downgradient ☐

Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 942.76 Ground Elevation 940.65
Depth of Well 71.7 Inside Casing Diameter (inches) 2.0"
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>3/10/04</u>	<u>35.96</u>	
*After Purging		<u>58.20</u>	
*Before Sampling	<u>3/10/04 10:22</u>	<u>38.17</u>	

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 35
No. of Well Volumes (based on current water level) 3
Was well pumped/bailed dry? No

Equipment used:
Bailer type PVC 'Dedicated Bailer _____
Pump type _____ 'Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions clear 30°'s
Field Measurements (after stabilization):
Temperature 12 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.7
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 709 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT

Site Name AMES-STORY Environmental Landfill Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. MW-23 Upgradient _____
Downgradient ☒

Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 945.98 Ground Elevation 943.62
Depth of Well 27.86 Inside Casing Diameter (in inches) 2.0"
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>3/7/04</u>	<u>7.09</u>	_____
*After Purging	_____	<u>24.0</u>	_____
*Before Sampling	<u>3/7/04 17:29</u>	<u>21.49</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 7.1
No. of Well Volumes (based on current water level) 2.1
Was well pumped/bailed dry? dry

Equipment used:
Bailer type PVC 'Dedicated Bailer _____
Pump type _____ 'Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions cloudy 30°'s
Field Measurements (after stabilization):
Temperature 11 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.4
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 1460 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT

Site Name AMES-STORY ENVIRONMENTAL LANDFILL Permit No. 85-SDP-13-91P
Monitoring Well/Piezometer No. MW-24 Upgradient _____
Downgradient ✓
Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 939.44 Ground Elevation 936.94
Depth of Well 20.60 Inside Casing Diameter (in inches) 2.0"
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>3/8/04</u>	<u>11.15</u>	_____
*After Purging		<u>20.65</u>	_____
*Before Sampling	<u>3/8/04 15:52</u>	<u>17.35</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 5.9
No. of Well Volumes (based on current water level) 3
Was well pumped/bailed dry? yes

Equipment used:
Bailer type PVC 'Dedicated Bailer _____
Pump type _____ 'Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions cloudy 40°
Field Measurements (after stabilization):
Temperature 10 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.1
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 1138 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

**FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT**

Site Name AMES-STORY Environmental Landfill Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. MW-25 Upgradient _____
Downgradient ✓

Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 906.34 Ground Elevation 903.94
Depth of Well 19.5 Inside Casing Diameter (in inches) 2.0"
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>3/7/04</u>	<u>9.08</u>	_____
*After Purging	_____	<u>10.16</u>	_____
*Before Sampling	<u>3/7/04 14:13</u>	<u>9.08</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) _____
No. of Well Volumes (based on current water level) _____
Was well pumped/bailed dry? _____

Equipment used: PVC
Bailer type _____ 'Dedicated Bailer _____
Pump type _____ 'Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions cloudy 30°'s
Field Measurements (after stabilization):
Temperature 9 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.6
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 1360 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

**FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT**

Site Name AMES-STORY ENVIRONMENTAL LANDFILL Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. MW-28 Upgradient _____

Name of person sampling RICHARD FREEMAN Downgradient ✓

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 946.02 Ground Elevation 942.55
Depth of Well 22.7 Inside Casing Diameter (in inches) 2.0"
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>3/2/04</u>	<u>6.89</u>	_____
*After Purging		<u>16.44</u>	_____
*Before Sampling	<u>3/2/04 13:20</u>	<u>6.99</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 7.65
No. of Well Volumes (based on current water level) 3
Was well pumped/bailed dry? No

Equipment used:
Bailer type PVC 'Dedicated Bailer _____
Pump type _____ 'Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions cloudy 30°'s
Field Measurements (after stabilization):
Temperature 6 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.5
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 1294 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

**FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT**

Site Name AMES-STORY Environmental Landfill Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. MW-29 Upgradient _____
Downgradient ✓

Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 945.61 Ground Elevation 942.55
Depth of Well 53.5 Inside Casing Diameter (inches) 2.0"
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>3-4-04</u>	<u>13.53</u>	_____
*After Purging	_____	<u>50.5</u>	_____
*Before Sampling	<u>3-4-04 14:35</u>	<u>46.16</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 9.25
No. of Well Volumes (based on current water level) 1.3
Was well pumped/bailed dry? yes

Equipment used: _____
Bailer type PVC _____ 'Dedicated Bailer _____
Pump type _____ 'Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions cloudy 30°'s
Field Measurements (after stabilization):
Temperature 10 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.5
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 787 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT

Site Name AMES-STORY Environmental Landfill Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. MW-30 Upgradient _____
Downgradient ✓

Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 945.54 Ground Elevation 943.62
Depth of Well 58 Inside Casing Diameter (in inches) 2.0"
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>3/8/04</u>	<u>37.43</u>	_____
*After Purging		<u>52.5</u>	_____
*Before Sampling	<u>3/8/04 12:40</u>	<u>37.43</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 10.5
No. of Well Volumes (based on current water level) 3
Was well pumped/bailed dry? NO

Equipment used:
Bailer type PVC 'Dedicated Bailer _____
Pump type _____ 'Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions 40° cloudy
Field Measurements (after stabilization):
Temperature 12 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 6.8
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 886 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

**FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT**

Site Name AMES-STORY ENVIRONMENTAL LANDFILL Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. MW-31 Upgradient _____
Downgradient ✓

Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 941.43 Ground Elevation 938.21
Depth of Well 36 Inside Casing Diameter (in inches) 2.0"
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>3-7-04</u>	<u>11.54</u>	_____
*After Purging		<u>23.65</u>	_____
*Before Sampling	<u>3-7-04 16:00</u>	<u>30.19</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 7.2
No. of Well Volumes (based on current water level) 1.2
Was well pumped/bailed dry? YES

Equipment used:
Bailer type PVC 'Dedicated Bailer _____
Pump type _____ 'Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions cloudy 30°'s
Field Measurements (after stabilization):
Temperature 12 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.4
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 1947 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

**FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT**

Site Name AMES-STORY ENVIRONMENTAL LANDFILL Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. MW-32 Upgradient _____
Downgradient ☒

Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 939.86 Ground Elevation 937.39
Depth of Well 50.5 Inside Casing Diameter (in inches) 2.0"
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>3/8/04</u>	<u>33.89</u>	_____
*After Purging		<u>48.28</u>	_____
*Before Sampling	<u>3/8/04 16:34</u>	<u>43.04</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 8.5
No. of Well Volumes (based on current water level) 3
Was well pumped/bailed dry? No

Equipment used:
Bailer type PVC Dedicated Bailer _____
Pump type _____ Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions 40° Cloudy
Field Measurements (after stabilization):
Temperature 11 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.0
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 1256 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT

Site Name AMES-STORY ENVIRONMENTAL LANDFILL Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. MW-33 Upgradient _____
Downgradient ✓

Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 906.32 Ground Elevation 904.06
Depth of Well 28.2 Inside Casing Diameter (in inches) 2.0"
Equipment Used SOLINGT

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>3-7-04</u>	<u>9.21</u>	_____
*After Purging	_____	<u>13.74</u>	_____
*Before Sampling	<u>3-7-04 13:28</u>	<u>9.21</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 8.3
No. of Well Volumes (based on current water level) 3
Was well pumped/bailed dry? No

Equipment used: PVC
Bailer type _____ 'Dedicated Bailer _____
Pump type _____ 'Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions 30°'s cloudy
Field Measurements (after stabilization):
Temperature 12 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.4
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 1154 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

**FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT**

Site Name AMES-STORY ENVIRONMENTAL LANDFILL Permit No. 85-SDP-13-91P
Monitoring Well/Piezometer No. MW-34 Upgradient _____
Downgradient ☒
Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 909.5 Ground Elevation 906.85
Depth of Well 17.3 Inside Casing Diameter (in inches) 2.0"
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>3-7-04</u>	<u>5.58</u>	_____
*After Purging		<u>14.24</u>	_____
*Before Sampling	<u>3-7-04 12:31</u>	<u>5.58</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 5121
No. of Well Volumes (based on current water level) 3
Was well pumped/bailed dry? No

Equipment used:

Bailer type PVC 'Dedicated Bailer _____
Pump type _____ 'Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions 30°'s cloudy
Field Measurements (after stabilization):
Temperature 7 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.4
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 1237 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT

Site Name AMES-STORY Environmental LANDFILL Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. MW-35 Upgradient _____
Downgradient ✓

Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 916.19 Ground Elevation 914.04
Depth of Well 20.6 Inside Casing Diameter (in inches) 2.0"
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>3-7-04</u>	<u>12.66</u>	_____
*After Purging	_____	<u>12.66</u>	_____
*Before Sampling	<u>3-7-04 11:34</u>	<u>12.66</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 2.3
No. of Well Volumes (based on current water level) 3
Was well pumped/bailed dry? NO

Equipment used:
Bailer type PVC 'Dedicated Bailer' _____
Pump type _____ 'Dedicated Bailer' _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions cloudy 30°'s
Field Measurements (after stabilization):
Temperature 5 Units _____
Equipment Used 7.4 HACH COMPANY POCKET PAL
pH _____
Equipment Used _____
Specific Conditions 1124 HACH COMPANY POCKET PAL Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

**FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT**

Site Name AMES-STORY Environmental Landfill Permit No. 85-SDP-13-91P
Monitoring Well/Piezometer No. MW-36 Upgradient ☒
Downgradient ☐
Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 948.97 Ground Elevation 947.30
Depth of Well 53.5 Inside Casing Diameter (in inches) 2.0
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>3/8/04</u>	<u>17.23</u>	
*After Purging		<u>50.65</u>	
*Before Sampling	<u>3/8/04 14:00</u>	<u>44.0</u>	

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 13
No. of Well Volumes (based on current water level) 2.1
Was well pumped/bailed dry? YES

Equipment used:
Bailer type PVC 'Dedicated Bailer _____
Pump type _____ 'Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions 40° Cloudy
Field Measurements (after stabilization):
Temperature 12 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.0
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 64.7 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

**FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT**

Site Name AMES-STORY Environmental Landfill Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. MW-37 Upgradient ☒ Downgradient ☐

Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 949.49 Ground Elevation 947.43
Depth of Well 30.6 Inside Casing Diameter (in inches) 2.0
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>3-8-04</u>	<u>8.0</u>	_____
*After Purging	_____	<u>26.43</u>	_____
*Before Sampling	<u>3-8-04 14:47</u>	<u>13.8</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 11.2
No. of Well Volumes (based on current water level) _____
Was well pumped/bailed dry? No

Equipment used:
Bailer type PVC 'Dedicated Bailer _____
Pump type _____ 'Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions 40° cloudy
Field Measurements (after stabilization):
Temperature 11 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.1
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 1647 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT

Site Name AMES-STORY Environmental Landfill Permit No. 85-SDP-13-91P
Monitoring Well/Piezometer No. MW-38 Upgradient _____
Downgradient ✓
Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 936.59 Ground Elevation 934.05
Depth of Well 35.2 Inside Casing Diameter (in inches) 2.0"
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>3/8/04</u>	<u>17.24</u>	_____
*After Purging		<u>52.57</u>	_____
*Before Sampling	<u>3/8/04 12:25</u>	<u>29.49</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 6.9
No. of Well Volumes (based on current water level) 1.1
Was well pumped/bailed dry? yes

Equipment used:
Bailer type PVC 'Dedicated Bailer _____
Pump type _____ 'Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions 40° cloudy
Field Measurements (after stabilization):
Temperature 12 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.1
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 1142 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT

Site Name AMES-STORY Environmental Landfill Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. MW-39 Upgradient _____
Downgradient ✓

Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 935.93 Ground Elevation 933.96
Depth of Well 30.2 Inside Casing Diameter (in inches) 2.0"
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>3/8/04</u>	<u>15.09</u>	_____
*After Purging	_____	<u>23.94</u>	_____
*Before Sampling	<u>3/8/04 12:54</u>	<u>16.66</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 7.5
No. of Well Volumes (based on current water level) 3
Was well pumped/bailed dry? No

Equipment used:
Bailer type PVC 'Dedicated Bailer _____
Pump type _____ 'Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions 40° cloudy
Field Measurements (after stabilization):
Temperature 12 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.1
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 1446 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

**FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT**

Site Name AMES-STORY ENVIRONMENTAL LANDFILL Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. MW-40 Upgradient _____
Downgradient ✓

Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 933.07 Ground Elevation 931.11
Depth of Well 20' Inside Casing Diameter (inches) 2.0"
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>3/16/09</u>	<u>5.76</u>	_____
*After Purging	_____	<u>17.35 20.7</u>	_____
*Before Sampling	<u>3/16/09 12:05</u>	<u>20.70 17.35</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 7.1
No. of Well Volumes (based on current water level) 3
Was well pumped/bailed dry? yes

Equipment used:
Bailer type PVC 'Dedicated Bailer _____
Pump type _____ 'Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions 40° cloudy
Field Measurements (after stabilization):
Temperature 8 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.5
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 955 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

**FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT**

Site Name AMES-STORY Environmental Landfill Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. MW-41 Upgradient _____
Downgradient ✓

Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 933.46 Ground Elevation 931.44
Depth of Well 45.58 Inside Casing Diameter (in-inches) 2.0"
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>3/11/04</u>	<u>16.13</u>	_____
*After Purging		<u>40.81</u>	_____
*Before Sampling	<u>3/11/04 12:55</u>	<u>25.01</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 14.3
No. of Well Volumes (based on current water level) 3
Was well pumped/bailed dry? No

Equipment used:

Bailer type PVC _____ *Dedicated Bailer _____
Pump type _____ *Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions cloudy 20°
Field Measurements (after stabilization):
Temperature 10 _____ Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.0 _____
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 764 _____ Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

**FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT**

Site Name AMES-STORY Environmental LANDFILL Permit No. 85-SDP-13-91P
Monitoring Well/Piezometer No. MW-42 Upgradient _____
Name of person sampling RICHARD FREEMAN Downgradient ✓

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 940.64 Ground Elevation 938.58
Depth of Well 48.37 Inside Casing Diameter (inches) 2.0
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>3/8/04</u>	<u>17.8</u>	_____
*After Purging	_____	<u>44.06</u>	_____
*Before Sampling	<u>3/8/04 13:53</u>	<u>28.30</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 13.4
No. of Well Volumes (based on current water level) 2.7
Was well pumped/bailed dry? yes

Equipment used: PVC
Bailer type _____ 'Dedicated Bailer _____
Pump type _____ 'Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions 40° cloudy
Field Measurements (after stabilization):
Temperature 4 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 7.7
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 820 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

**FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT**

Site Name AMES-STORY Environmental LANDFILL Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. MW-43 Upgradient _____
Downgradient _____

Name of person sampling RICHARD FREEMAN

A.) MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? YES Standing Water or Litter? No
If no, explain _____ If yes, explain _____

B.) GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Elevation: Top of inner well casing 940.83 Ground Elevation 938.62
Depth of Well 28.13 Inside Casing Diameter (inches) 2.0"
Equipment Used SOLINST

Groundwater Level (+/- 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
Before Purging	<u>3/8/04</u>	<u>14.38</u>	_____
*After Purging		<u>26.08</u>	_____
*Before Sampling	<u>3/8/04 14:40</u>	<u>17.76</u>	_____

C.) WELL PURGING

Quantity of Water Removed from Well (gallons) 6.25
No. of Well Volumes (based on current water level) 3
Was well pumped/bailed dry? No

Equipment used: PVC
Bailer type _____ 'Dedicated Bailer _____
Pump type _____ 'Dedicated Bailer _____
If not dedicated, method of cleaning _____

D.) FIELD MEASUREMENT

Weather Conditions 40° cloudy
Field Measurements (after stabilization):
Temperature 13 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 8.2
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 1192 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

*Omit if only measuring groundwater elevations.

FORM FOR
SURFACE WATER SAMPLING

Site Name AMES-STORY ENVIRONMENTAL LANDFILL Permit No. 85-SDP-13-91P
Monitoring Well/Piezometer No. SW-1 Date/Time 3/1/04 14:48
Name of person sampling RICHARD FREEMAN

A.) TYPE OF MONITORING POINT

Stream ✓ Open Tile _____
Road Ditch _____ Tile with Riser _____
Drainage Ditch _____ Other _____

B.) PURPOSE OF MONITORING POINT

Upstream ✓ Downstream _____
Within Landfill _____ Other _____

C.) MONITORING POINT CONDITIONS

General description/condition of monitoring point _____

Was monitoring point dry? No Too little water to sample? No
Was water flowing? yes If yes, estimate quantity good flow
If yes, estimate depth 4' wide

Was water discolored? No If yes, describe below.
Does water have odor? No If yes, describe below.
Was ground discolored? No If yes, describe below.
Litter present? No If yes, describe below.

Comments _____

D.) FIELD MEASUREMENT

Weather Conditions 30°15 cloudy

Field Measurements (after stabilization):

Temperature 5 Units _____
Equipment Used HACH COMPANY POCKET PAL
pH 6.2
Equipment Used HACH COMPANY POCKET PAL
Specific Conditions 101.7 Units _____
Equipment Used HACH COMPANY POCKET PAL

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

**FORM FOR
SURFACE WATER SAMPLING**

Site Name AMES-STORY ENVIRONMENTAL LANDFILL Permit No. 85-SDP-13-91P
 Monitoring Well/Piezometer No. SW-2 Date/Time 3/1/04 15:25
 Name of person sampling RICHARD FREEMAN

A.) TYPE OF MONITORING POINT

Stream	<u>✓</u>	Open Tile	_____
Road Ditch	_____	Tile with Riser	_____
Drainage Ditch	_____	Other	_____

B.) PURPOSE OF MONITORING POINT

Upstream	_____	Downstream	<u>✓</u>
Within Landfill	_____	Other	_____

C.) MONITORING POINT CONDITIONS

General description/condition of monitoring point _____

Was monitoring point dry? No Too little water to sample? No
 Was water flowing? Yes If yes, estimate quantity good flow
 If yes, estimate depth 4ft wide

Was water discolored?	<u>No</u>	If yes, describe below.
Does water have odor?	<u>No</u>	If yes, describe below.
Was ground discolored?	<u>No</u>	If yes, describe below.
Litter present?	<u>No</u>	If yes, describe below.

Comments _____

D.) FIELD MEASUREMENT

Weather Conditions 30°'s cloudy

Field Measurements (after stabilization):

Temperature	<u>5</u>	Units	_____
Equipment Used	<u>HACH COMPANY POCKET PAL</u>		
pH	<u>7.4</u>		
Equipment Used	<u>HACH COMPANY POCKET PAL</u>		
Specific Conditions	<u>1025</u>	Units	_____
Equipment Used	<u>HACH COMPANY POCKET PAL</u>		

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

FORM FOR
SURFACE WATER SAMPLING

Site Name AMES-STORY ENVIRONMENTAL LANDFILL Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. SW-3 Date/Time 3/1/04

Name of person sampling RICHARD FREEMAN

A.) TYPE OF MONITORING POINT

Stream	_____	Open Tile	<input checked="" type="checkbox"/>
Road Ditch	_____	Tile with Riser	_____
Drainage Ditch	_____	Other	_____

B.) PURPOSE OF MONITORING POINT

Upstream	_____	Downstream	<input checked="" type="checkbox"/>
Within Landfill	_____	Other	_____

C.) MONITORING POINT CONDITIONS

General description/condition of monitoring point _____

Was monitoring point dry? Dry Too little water to sample? _____
Was water flowing? _____ If yes, estimate quantity _____
If yes, estimate depth _____

Was water discolored?	_____	If yes, describe below.
Does water have odor?	_____	If yes, describe below.
Was ground discolored?	_____	If yes, describe below.
Litter present?	_____	If yes, describe below.

Comments _____

D.) FIELD MEASUREMENT

Weather Conditions _____

Field Measurements (after stabilization):

Temperature	_____	Units
Equipment Used	<u>HACH COMPANY</u>	<u>POCKET PAL</u>
pH	_____	
Equipment Used	<u>HACH COMPANY</u>	<u>POCKET PAL</u>
Specific Conditions	_____	Units
Equipment Used	<u>HACH COMPANY</u>	<u>POCKET PAL</u>

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

FORM FOR
SURFACE WATER SAMPLING

Site Name AMES-STORY ENVIRONMENTAL LANDFILL Permit No. 85-SDP-13-91P
Monitoring Well/Piezometer No. SW-4 Date/Time 3/1/04 14:12
Name of person sampling RICHARD FREEMAN

A.) TYPE OF MONITORING POINT

Stream	_____	Open Tile	_____
Road Ditch	_____	Tile with Riser	_____
Drainage Ditch	<input checked="" type="checkbox"/>	Other	_____

B.) PURPOSE OF MONITORING POINT

Upstream	<input checked="" type="checkbox"/>	Downstream	_____
Within Landfill	_____	Other	_____

C.) MONITORING POINT CONDITIONS

General description/condition of monitoring point _____

Was monitoring point dry? No Too little water to sample? No
Was water flowing? Yes If yes, estimate quantity good
If yes, estimate depth 0.5 ft wide

Was water discolored?	<u>NR</u>	If yes, describe below.
Does water have odor?	<u>No</u>	If yes, describe below.
Was ground discolored?	<u>No</u>	If yes, describe below.
Litter present?	<u>No</u>	If yes, describe below.

Comments _____

D.) FIELD MEASUREMENT

Weather Conditions 30°'s cloudy

Field Measurements (after stabilization):

Temperature	<u>5</u>	Units
Equipment Used	<u>HACH COMPANY POCKET PAL</u>	
pH	<u>6.9</u>	
Equipment Used	<u>HACH COMPANY POCKET PAL</u>	
Specific Conditions	<u>3622</u>	Units
Equipment Used	<u>HACH COMPANY POCKET PAL</u>	

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

FORM FOR
SURFACE WATER SAMPLING

Site Name AMES-STORY ENVIRONMENTAL LANDFILL Permit No. BS-SDP-13-91P
Monitoring Well/Piezometer No. SW-5 Date/Time 3/1/09 13:24
Name of person sampling RICHARD FREEMAN

A.) TYPE OF MONITORING POINT

Stream	_____	Open Tile	_____
Road Ditch	_____	Tile with Riser	_____
Drainage Ditch	<u>✓</u>	Other	_____

B.) PURPOSE OF MONITORING POINT

Upstream	_____	Downstream	<u>✓</u>
Within Landfill	_____	Other	_____

C.) MONITORING POINT CONDITIONS

General description/condition of monitoring point _____

Was monitoring point dry? No Too little water to sample? No
Was water flowing? ~~yes~~ If yes, estimate quantity good flow
If yes, estimate depth 0.5 ft wide

Was water discolored?	<u>No</u>	If yes, describe below.
Does water have odor?	<u>No</u>	If yes, describe below.
Was ground discolored?	<u>No</u>	If yes, describe below.
Litter present?	<u>No</u>	If yes, describe below.

Comments _____

D.) FIELD MEASUREMENT

Weather Conditions cloudy 30°'s

Field Measurements (after stabilization):

Temperature	<u>4</u>	Units
Equipment Used	<u>HACH COMPANY POCKET PAL</u>	
pH	<u>7.5</u>	
Equipment Used	<u>HACH COMPANY POCKET PAL</u>	
Specific Conditions	<u>BB6</u>	Units
Equipment Used	<u>HACH COMPANY POCKET PAL</u>	

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

**FORM FOR
SURFACE WATER SAMPLING**

Site Name AMES-STORY ENVIRONMENTAL LANDFILL Permit No. 85-SDP-13-91P

Monitoring Well/Piezometer No. SW-6 Date/Time 3/1/04 12:43

Name of person sampling RICHARD FREEMAN

A.) TYPE OF MONITORING POINT

Stream	_____	Open Tile	<u>✓</u>
Road Ditch	_____	Tile with Riser	_____
Drainage Ditch	_____	Other	_____

B.) PURPOSE OF MONITORING POINT

Upstream	_____	Downstream	<u>✓</u>
Within Landfill	_____	Other	_____

C.) MONITORING POINT CONDITIONS

General description/condition of monitoring point _____

Was monitoring point dry? No Too little water to sample? No
 Was water flowing? yes If yes, estimate quantity good flow
 If yes, estimate depth pipe flow

Was water discolored? No If yes, describe below.
 Does water have odor? No If yes, describe below.
 Was ground discolored? Fe stained If yes, describe below.
 Litter present? No If yes, describe below.

Comments _____

D.) FIELD MEASUREMENT

Weather Conditions cloudy 30°'s

Field Measurements (after stabilization):

Temperature	<u>15</u>	Units	_____
Equipment Used	<u>HACH COMPANY POCKET PAL</u>		
pH	<u>7.8</u>	Units	_____
Equipment Used	<u>HACH COMPANY POCKET PAL</u>		
Specific Conditions	<u>1475</u>	Units	_____
Equipment Used	<u>HACH COMPANY POCKET PAL</u>		

Comments _____

NOTE: Attach Laboratory Report and 8-12" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

ATTACHMENT C
Concentration Versus Time Tables & Graphs
Water Table System

AMES-STORY ENVIRONMENTAL LANDFILL
85-SDP-13-91P
MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD WT	WATER TABLE WELLS												
				U.G.W MW-37	D.G.W MW 6	D.G.W MW 28	D.G.W MW 23	D.G.W MW 24	D.G.W MW 31	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.G.W MW 39	D.G.W MW 40	D.G.W MW 43
04/23/91	1,1-Dichloroethene *	7	1			<1	<1	<1	<1	<1	---	<1				
10/15/91	1,1-Dichloroethene *	7	1			<1	<1	---	<1	<1	---	<1				
01/23/92	1,1-Dichloroethene *	7	1			<1	<1	---	<1	<1	<1	<1				
03/23/92	1,1-Dichloroethene *	7	1			<1	<1	<1	<1	<1	<1	<1				
09/30/92	1,1-Dichloroethene *	7	1			NT	NT	NT	NT	NT	NT	NT				
03/05/93	1,1-Dichloroethene *	7	1			NT	NT	NT	NT	NT	NT	NT				
09/21/93	1,1-Dichloroethene *	7	1			NT	NT	NT	NT	NT	NT	NT				
03/23/94	1,1-Dichloroethene *	7	1			NT	NT	NT	NT	NT	NT	NT				
09/16/94	1,1-Dichloroethene *	7	1			NT	NT	NT	NT	NT	NT	NT				
03/16/95	1,1-Dichloroethene *	7	1			NT	NT	NT	NT	NT	NT	NT				
09/13/95	1,1-Dichloroethene *	7	1			NT	NT	NT	NT	NT	NT	NT				
03/28/96	1,1-Dichloroethene *	7	1	<1		NT	NT	NT	NT	NT	NT	NT	<1			
06/20/96	1,1-Dichloroethene *	7	1	<1		NT	NT	NT	NT	NT	NT	NT	<1			
09/13/96	1,1-Dichloroethene *	7	1	<1		NT	NT	Dry	NT	NT	NT	NT	<1			
03/19/97	1,1-Dichloroethene *	7	1	NT		NT	NT	NT	NT	NT	NT	NT	NT			
06/18/97	1,1-Dichloroethene *	7	1	<1		<1	NT	NT	NT	NT	NT	NT	<1			
08/30/97	1,1-Dichloroethene *	7	1	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/10/98	1,1-Dichloroethene *	7	1	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
09/21/98	1,1-Dichloroethene *	7	1	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/19/99	1,1-Dichloroethene *	7	1	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
09/21/99	1,1-Dichloroethene *	7	1	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/21/2000	1,1-Dichloroethene *	7	1	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
06/28/2000	1,1-Dichloroethene *	7	1	NT	<1	NT	NT	DRY	NT	NT	NT	NT	NT	<1	<1	<1
09/28/2000	1,1-Dichloroethene *	7	1	NT	NT	<1	NT	DRY	NT	NT	NT	NT	DRY	<1	<1	<1
12/27/2000	1,1-Dichloroethene *	7	1	NT	<1	NT	NT	DRY	NT	NT	NT	NT	NT	<1	<1	<1
03/28/2001	1,1-Dichloroethene *	7	1	NT	<1	<1	NT	NT	NT	NT	NT	NT	NT	<1	<1	<1
09/02/2001	1,1-Dichloroethene *	7	1	NT	NT	<1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/19/2002	1,1-Dichloroethene *	7	1	NT	NT	<1	NT	Dry	NT	NT	NT	NT	NT	NT	NT	NT
09/19/2002	1,1-Dichloroethene *	7	1	NT	NT	NT	NT	Dry	NT	NT	NT	NT	NT	NT	NT	NT
03/14/2003	1,1-Dichloroethene *	7	1	NT	NT	NT	NT	Dry	NT	NT	NT	NT	NT	NT	NT	NT
09/29/2003	1,1-Dichloroethene *	7	1	NT	NT	NT	NT	Dry	NT	NT	NT	NT	NT	NT	NT	NT
03/08/2004	1,1-Dichloroethene *	7	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/27/2004	1,1-Dichloroethene *	7	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Mean					ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Standard Deviation (STD)					ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Mean + 2 STD					ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

AMES-STORY ENVIRONMENTAL LANDFILL
85-SDP-13-91P
MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD WT	WATER TABLE WELLS												
				U.G.W MW-37	D.G.W MW 6	D.G.W MW 28	D.G.W MW 23	D.G.W MW 24	D.G.W MW 31	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.G.W MW 39	D.G.W MW 40	D.G.W MW 43
ug/L																
04/23/91	1,1,1-Trichloroethane *	200	1			<1	<1	<1	<1	<1	---	<1				
10/15/91	1,1,1-Trichloroethane *	200	1			<1	<1	---	<1	<1	---	<1				
01/23/92	1,1,1-Trichloroethane *	200	1			<1	<1	---	<1	<1	<1	<1				
03/23/92	1,1,1-Trichloroethane *	200	1			<1	<1	<1	<1	<1	<1	<1				
09/30/92	1,1,1-Trichloroethane *	200	1			NT	NT	NT	NT	NT	NT	NT				
03/05/93	1,1,1-Trichloroethane *	200	1			NT	NT	NT	NT	NT	NT	NT				
09/21/93	1,1,1-Trichloroethane *	200	1			NT	NT	NT	NT	NT	NT	NT				
03/23/94	1,1,1-Trichloroethane *	200	1			NT	NT	NT	NT	NT	NT	NT				
09/16/94	1,1,1-Trichloroethane *	200	1			NT	NT	NT	NT	NT	NT	NT				
03/16/95	1,1,1-Trichloroethane *	200	1			NT	NT	NT	NT	NT	NT	NT				
09/13/95	1,1,1-Trichloroethane *	200	1			NT	NT	NT	NT	NT	NT	NT				
03/28/96	1,1,1-Trichloroethane *	200	1	<1		NT	NT	NT	NT	NT	NT	NT	<1			
06/20/96	1,1,1-Trichloroethane *	200	1	<1		NT	NT	NT	NT	NT	NT	NT	<1			
09/13/96	1,1,1-Trichloroethane *	200	1	<1		NT	NT	Dry	NT	NT	NT	NT	<1			
03/19/97	1,1,1-Trichloroethane *	200	1	NT		NT	NT	NT	NT	NT	NT	NT	NT			
06/18/97	1,1,1-Trichloroethane *	200	1	<1		<1	NT	NT	NT	NT	NT	NT	<1			
08/30/97	1,1,1-Trichloroethane *	200	1	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/10/98	1,1,1-Trichloroethane *	200	1	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
09/21/98	1,1,1-Trichloroethane *	200	1	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/18/99	1,1,1-Trichloroethane *	200	1	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
09/21/99	1,1,1-Trichloroethane *	200	1	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/21/2000	1,1,1-Trichloroethane *	200	1	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
06/28/2000	1,1,1-Trichloroethane *	200	1	NT	<1	NT	NT	DRY	NT	NT	NT	NT	NT	<1	<1	<1
09/28/2000	1,1,1-Trichloroethane *	200	1	NT	NT	<1	NT	DRY	NT	NT	NT	NT	DRY	<1	<1	<1
12/27/2000	1,1,1-Trichloroethane *	200	1	NT	<1	NT	NT	Dry	NT	NT	NT	NT	NT	<1	<1	<1
03/28/2001	1,1,1-Trichloroethane *	200	1	NT	<1	<1	NT	NT	NT	NT	NT	NT	NT	<1	<1	<1
09/02/2001	1,1,1-Trichloroethane *	200	1	NT	NT	<1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/19/2002	1,1,1-Trichloroethane *	200	1	NT	NT	<1	NT	Dry	NT	NT	NT	NT	NT	NT	NT	NT
09/19/2002	1,1,1-Trichloroethane *	200	1	NT	NT	NT	NT	Dry	NT	NT	NT	NT	NT	NT	NT	NT
03/14/2003	1,1,1-Trichloroethane *	200	1	NT	NT	NT	NT	Dry	NT	NT	NT	NT	NT	NT	NT	NT
09/29/2003	1,1,1-Trichloroethane *	200	1	NT	NT	NT	NT	Dry	NT	NT	NT	NT	NT	NT	NT	NT
03/08/2004	1,1,1-Trichloroethane *	200	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/27/2004	1,1,1-Trichloroethane *	200	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Mean				ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
Standard Deviation (STD)				ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
Mean + 2 STD				ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

AMES-STORY ENVIRONMENTAL LANDFILL
85-SDP-13-91P
MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD WT	WATER TABLE WELLS												
				U.G.W MW-37	D.G.W MW 6	D.G.W MW 28	D.G.W MW 23	D.G.W MW 24	D.G.W MW 31	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.G.W MW 39	D.G.W MW 40	D.G.W MW 43
	ug/L															
04/23/91	1,2-Dichloroethane *	5	0.4			<1	<1	<1	<1	<1	---	<1				
10/15/91	1,2-Dichloroethane *	5	0.4			<1	<1	---	<1	<1	---	<1				
01/23/92	1,2-Dichloroethane *	5	0.4			<1	<1	---	<1	<1	<1	<1				
03/23/92	1,2-Dichloroethane *	5	0.4			<1	<1	<1	<1	<1	<1	<1				
09/30/92	1,2-Dichloroethane *	5	0.4			NT	NT	NT	NT	NT	NT	NT				
03/05/93	1,2-Dichloroethane *	5	0.4			NT	NT	NT	NT	NT	NT	NT				
09/21/93	1,2-Dichloroethane *	5	0.4			NT	NT	NT	NT	NT	NT	NT				
03/23/94	1,2-Dichloroethane *	5	0.4			NT	NT	NT	NT	NT	NT	NT				
09/16/94	1,2-Dichloroethane *	5	0.4			NT	NT	NT	NT	NT	NT	NT				
03/16/95	1,2-Dichloroethane *	5	0.4			NT	NT	NT	NT	NT	NT	NT				
09/13/95	1,2-Dichloroethane *	5	0.4			NT	NT	NT	NT	NT	NT	NT				
03/28/96	1,2-Dichloroethane *	5	0.4	<0.4		NT	NT	NT	NT	NT	NT	NT	<0.4			
06/20/96	1,2-Dichloroethane *	5	0.4	<0.4		NT	NT	NT	NT	NT	NT	NT	<0.4			
09/13/96	1,2-Dichloroethane *	5	0.4	<0.4		NT	NT	Dry	NT	NT	NT	NT	<0.4			
03/19/97	1,2-Dichloroethane *	5	0.4	<0.4		NT	NT	DRY	NT	NT	NT	NT	<0.4			
06/18/97	1,2-Dichloroethane *	5	0.4	<0.4		<0.4	NT	NT	NT	NT	NT	NT	<0.4			
08/30/97	1,2-Dichloroethane *	5	0.4	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/10/98	1,2-Dichloroethane *	5	0.4	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
09/21/98	1,2-Dichloroethane *	5	0.4	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/18/99	1,2-Dichloroethane *	5	0.4	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/21/99	1,2-Dichloroethane *	5	0.4	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/21/2000	1,2-Dichloroethane *	5	0.4	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
06/28/2000	1,2-Dichloroethane *	5	0.4	NT	<0.4	NT	NT	DRY	NT	NT	NT	NT	NT	<0.4	<0.4	<0.4
09/28/2000	1,2-Dichloroethane *	5	0.4	NT	NT	<0.4	NT	DRY	NT	NT	NT	NT	DRY	<0.4	<0.4	<0.4
12/27/2000	1,2-Dichloroethane *	5	0.4	NT	<0.4	NT	NT	Dry	NT	NT	NT	NT	NT	<0.4	<0.4	<0.4
03/28/2001	1,2-Dichloroethane *	5	0.4	NT	<0.4	<0.4	NT	NT	NT	NT	NT	NT	NT	<0.4	<0.4	<0.4
09/02/2001	1,2-Dichloroethane *	5	0.4	NT	NT	<0.4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/19/2002	1,2-Dichloroethane *	5	0.4	NT	NT	<0.4	NT	Dry	NT	NT	NT	NT	NT	NT	NT	NT
09/19/2002	1,2-Dichloroethane *	5	0.4	NT	NT	NT	NT	Dry	NT	NT	NT	NT	NT	NT	NT	NT
03/14/2003	1,2-Dichloroethane *	5	0.4	NT	NT	NT	NT	Dry	NT	NT	NT	NT	NT	NT	NT	NT
09/29/2003	1,2-Dichloroethane *	5	0.4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/08/2004	1,2-Dichloroethane *	5	0.4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/27/2004	1,2-Dichloroethane *	5	0.4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Mean			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Standard Deviation (STD)			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Mean + 2 STD			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

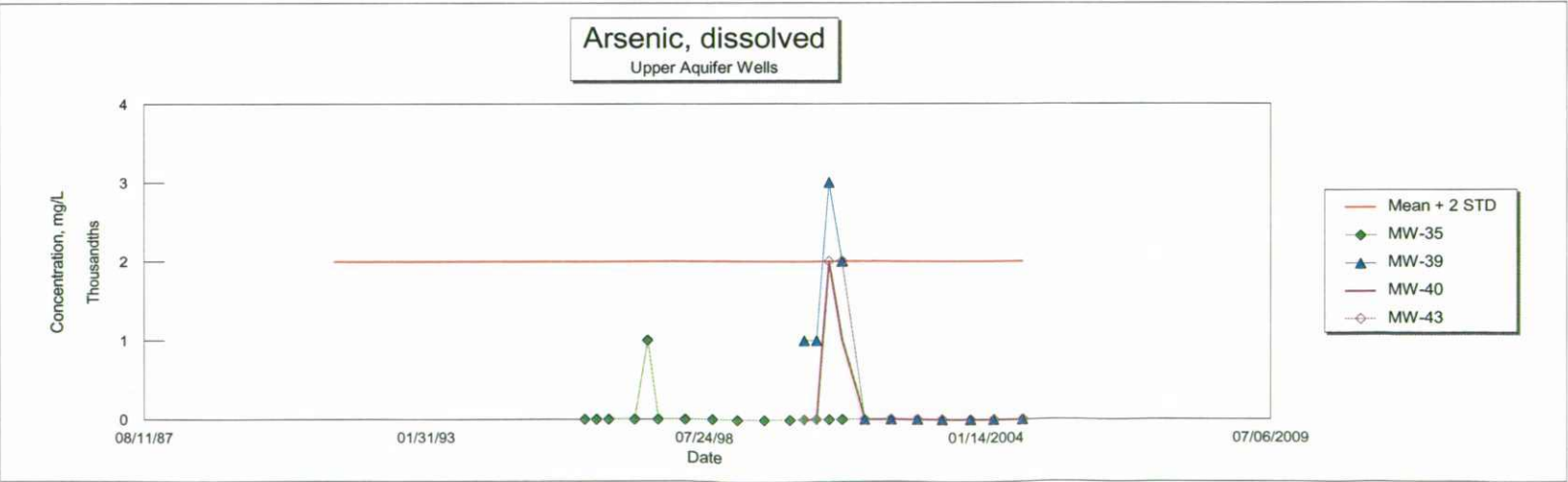
AMES-STORY ENVIRONMENTAL LANDFILL
85-SDP-13-91P
MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD WT	WATER TABLE WELLS												
				U.G.W MW-37	D.G.W MW 6	D.G.W MW 28	D.G.W MW 23	D.G.W MW 24	D.G.W MW 31	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.G.W MW 39	D.G.W MW 40	D.G.W MW 43
	ug/L															
04/23/91	1,4-Dichlorobenzene *	75	1			<1	<1	<1	<1	<1	---	<1				
10/15/91	1,4-Dichlorobenzene *	75	1			<1	<1	---	<1	<1	---	<1				
01/23/92	1,4-Dichlorobenzene *	75	1			<1	<1	---	<1	<1	<1	<1				
03/23/92	1,4-Dichlorobenzene *	75	1			<1	<1	<1	<1	<1	<1	<1				
09/30/92	1,4-Dichlorobenzene *	75	1			NT	NT	NT	NT	NT	NT	NT				
03/05/93	1,4-Dichlorobenzene *	75	1			NT	NT	NT	NT	NT	NT	NT				
09/21/93	1,4-Dichlorobenzene *	75	1			NT	NT	NT	NT	NT	NT	NT				
03/23/94	1,4-Dichlorobenzene *	75	1			NT	NT	NT	NT	NT	NT	NT				
09/16/94	1,4-Dichlorobenzene *	75	1			NT	NT	NT	NT	NT	NT	NT				
03/16/95	1,4-Dichlorobenzene *	75	1			NT	NT	NT	NT	NT	NT	NT				
09/13/95	1,4-Dichlorobenzene *	75	1			NT	NT	NT	NT	NT	NT	NT				
03/28/96	1,4-Dichlorobenzene *	75	1	<1		NT	NT	NT	NT	NT	NT	NT	<1			
06/20/96	1,4-Dichlorobenzene *	75	1	<1		NT	NT	NT	NT	NT	NT	NT	<1			
09/13/96	1,4-Dichlorobenzene *	75	1	<1		NT	NT	Dry	NT	NT	NT	NT	<1			
03/19/97	1,4-Dichlorobenzene *	75	1	NT		NT	NT	NT	NT	NT	NT	NT	NT			
06/18/97	1,4-Dichlorobenzene *	75	1	<1		<1	NT	NT	NT	NT	NT	NT	<1			
08/30/97	1,4-Dichlorobenzene *	75	1	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/10/98	1,4-Dichlorobenzene *	75	1	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
09/21/98	1,4-Dichlorobenzene *	75	1	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/18/99	1,4-Dichlorobenzene *	75	1	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
09/21/99	1,4-Dichlorobenzene *	75	1	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/21/2000	1,4-Dichlorobenzene *	75	1	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
06/28/2000	1,4-Dichlorobenzene *	75	1	NT	<1	NT	NT	DRY	NT	NT	NT	NT	NT	<1	<1	<1
09/28/2000	1,4-Dichlorobenzene *	75	1	NT	NT	<1	NT	DRY	NT	NT	NT	NT	DRY	<1	<1	<1
12/27/2000	1,4-Dichlorobenzene *	75	1	NT	<1	NT	NT	Dry	NT	NT	NT	NT	NT	<1	<1	<1
03/28/2001	1,4-Dichlorobenzene *	75	1	NT	<1	<1	NT	NT	NT	NT	NT	NT	NT	<1	<1	<1
09/02/2001	1,4-Dichlorobenzene *	75	1	NT	NT	<1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/19/2002	1,4-Dichlorobenzene *	75	1	NT	NT	<1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/19/2002	1,4-Dichlorobenzene *	75	1	NT	NT	NT	NT	Dry	NT	NT	NT	NT	NT	NT	NT	NT
03/14/2003	1,4-Dichlorobenzene *	75	1	NT	NT	NT	NT	Dry	NT	NT	NT	NT	NT	NT	NT	NT
09/29/2003	1,4-Dichlorobenzene *	75	1	NT	NT	NT	NT	Dry	NT	NT	NT	NT	NT	NT	NT	NT
03/08/2004	1,4-Dichlorobenzene *	75	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/27/2004	1,4-Dichlorobenzene *	75	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Mean			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Standard Deviation (STD)			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Mean + 2 STD			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

AMES-STORY ENVIRONMENTAL LANDFILL
85-SDP-13-91P
MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER mg/L	ACTION LEVEL	MEAN + 2 STD WT	WATER TABLE WELLS												
				U.G.W MW-37	D.G.W MW 6	D.G.W MW 28	D.G.W MW 23	D.G.W MW 24	D.G.W MW 31	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.G.W MW 39	D.G.W MW 40	D.G.W MW 43
04/23/91	Arsenic, dissolved	0.05	0.002			<0.005	<0.005	<0.005	<0.005	<0.005	---	<0.005				
10/15/91	Arsenic, dissolved	0.05	0.002			<0.005	<0.005	---	<0.005	<0.005	---	<0.005				
01/23/92	Arsenic, dissolved	0.05	0.002			<0.005	<0.005	---	<0.005	<0.005	<0.005	<0.005				
03/23/92	Arsenic, dissolved	0.05	0.002			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005				
09/30/92	Arsenic, dissolved	0.05	0.002			NT	NT	NT	NT	NT	NT	NT				
03/05/93	Arsenic, dissolved	0.05	0.002			NT	NT	NT	NT	NT	NT	NT				
09/21/93	Arsenic, dissolved	0.05	0.002			NT	NT	NT	NT	NT	NT	NT				
03/23/94	Arsenic, dissolved	0.05	0.002			NT	NT	NT	NT	NT	NT	NT				
09/16/94	Arsenic, dissolved	0.05	0.002			NT	NT	NT	NT	NT	NT	NT				
03/16/95	Arsenic, dissolved	0.05	0.002			NT	NT	NT	NT	NT	NT	NT				
09/13/95	Arsenic, dissolved	0.05	0.002			NT	NT	NT	NT	NT	NT	NT				
03/28/96	Arsenic, dissolved	0.05	0.002	<0.005		NT	NT	NT	NT	NT	NT	NT	<0.005			
06/20/96	Arsenic, dissolved	0.05	0.002	<0.005		NT	NT	NT	NT	NT	NT	NT	<0.005			
09/13/96	Arsenic, dissolved	0.05	0.002	<0.005		NT	NT	Dry	NT	NT	NT	NT	<0.005			
03/19/97	Arsenic, dissolved	0.05	0.002	NT		NT	NT	NT	NT	NT	NT	NT	NT			
06/18/97	Arsenic, dissolved	0.05	0.002	0.002		<0.001	NT	NT	NT	NT	NT	NT	0.001			
08/30/97	Arsenic, dissolved	0.05	0.002	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/10/98	Arsenic, dissolved	0.05	0.002	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
09/21/98	Arsenic, dissolved	0.05	0.002	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/18/99	Arsenic, dissolved	0.05	0.002	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
09/21/99	Arsenic, dissolved	0.05	0.002	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/21/2000	Arsenic, dissolved	0.05	0.002	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
06/28/2000	Arsenic, dissolved	0.05	0.002	NT	<0.001	NT	NT	DRY	NT	NT	NT	NT	NT	0.001	<0.001	<0.001
09/28/2000	Arsenic, dissolved	0.05	0.002	NT	NT	<0.001	NT	DRY	NT	NT	NT	NT	DRY	0.001	<0.001	<0.001
12/27/2000	Arsenic, dissolved	0.05	0.002	NT	0.002	NT	NT	Dry	NT	NT	NT	NT	NT	0.003	0.002	0.002
03/28/2001	Arsenic, dissolved	0.05	0.002	NT	<0.001	<0.001	NT	NT	NT	NT	NT	NT	NT	0.002	0.001	0.002
09/02/2001	Arsenic, dissolved	0.05	0.002	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/19/2002	Arsenic, dissolved	0.01	0.002	NT	NT	<0.001	NT	Dry	NT	NT	NT	NT	NT	NT	NT	NT
09/19/2002	Arsenic, dissolved	0.01	0.002	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/14/2003	Arsenic, dissolved	0.01	0.002	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/29/2003	Arsenic, dissolved	0.01	0.002	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/08/2004	Arsenic, dissolved	0.01	0.002	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/27/2004	Arsenic, dissolved	0.01	0.002	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

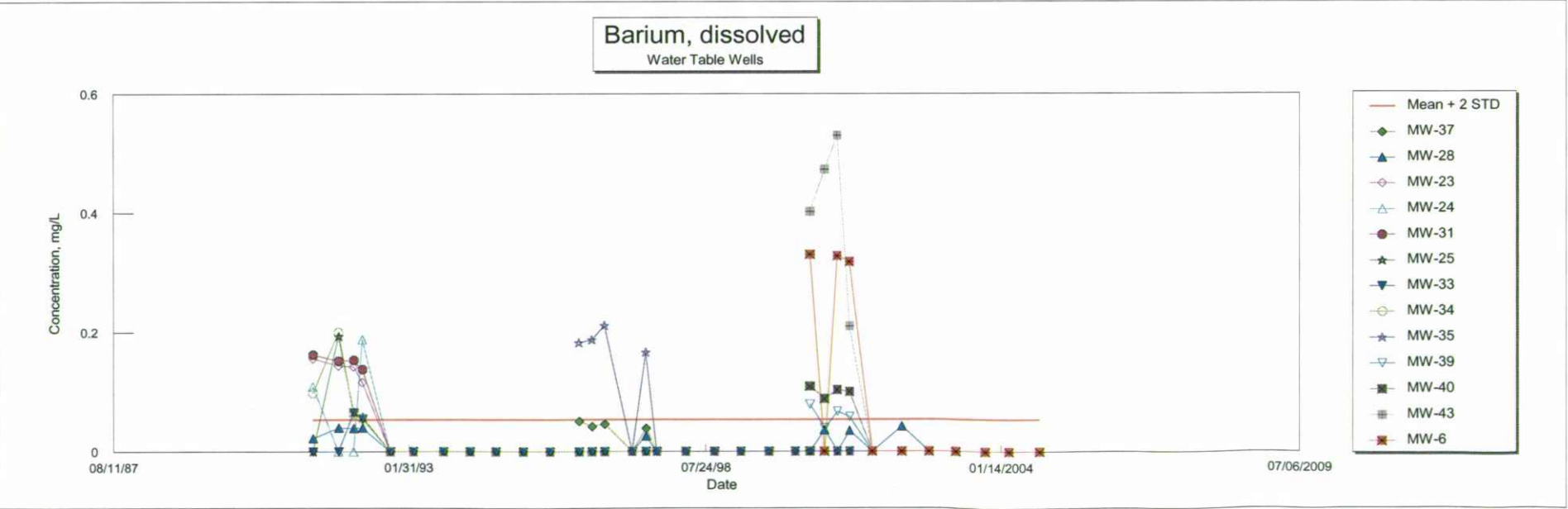
Mean	0.002	0.002	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	0.001	0.00175	0.0015	0.002
Standard Deviation (STD)	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	0	0.000829	0.0005	0
Mean + 2 STD	0.002	0.002	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	0.001	0.003408	0.0025	0.002



AMES-STORY ENVIRONMENTAL LANDFILL
85-SDP-13-91P
MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD WT	WATER TABLE WELLS												
				U.G.W MW-37	D.G.W MW 6	D.G.W MW 28	D.G.W MW 23	D.G.W MW 24	D.G.W MW 31	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.G.W MW 39	D.G.W MW 40	D.G.W MW 43
04/23/91	Barium, dissolved	2.000	0.054			0.022	0.156	0.109	0.162	0.14	---	0.098				
10/15/91	Barium, dissolved	2.000	0.054			0.040	0.144	---	0.152	0.193	---	0.200				
01/23/92	Barium, dissolved	2.000	0.054			0.039	0.142	---	0.153	0.066	0.065	0.063				
03/23/92	Barium, dissolved	2.000	0.054			0.040	0.116	0.188	0.138	0.058	0.055	0.055				
09/30/92	Barium, dissolved	2.000	0.054			NT	NT	NT	NT	NT	NT	NT				
03/05/93	Barium, dissolved	2.000	0.054			NT	NT	NT	NT	NT	NT	NT				
09/21/93	Barium, dissolved	2.000	0.054			NT	NT	NT	NT	NT	NT	NT				
03/23/94	Barium, dissolved	2.000	0.054			NT	NT	NT	NT	NT	NT	NT				
09/16/94	Barium, dissolved	2.000	0.054			NT	NT	NT	NT	NT	NT	NT				
03/16/95	Barium, dissolved	2.000	0.054			NT	NT	NT	NT	NT	NT	NT				
09/13/95	Barium, dissolved	2.000	0.054			NT	NT	NT	NT	NT	NT	NT				
03/28/96	Barium, dissolved	2.000	0.054	0.051		NT	NT	NT	NT	NT	NT	NT	0.182			
06/20/96	Barium, dissolved	2.000	0.054	0.042		NT	NT	NT	NT	NT	NT	NT	0.187			
09/13/96	Barium, dissolved	2.000	0.054	0.046		NT	NT	Dry	NT	NT	NT	NT	0.211			
03/19/97	Barium, dissolved	2.000	0.054	NT		NT	NT	NT	NT	NT	NT	NT	NT			
06/18/97	Barium, dissolved	2.000	0.054	0.039		0.026	NT	NT	NT	NT	NT	NT	0.166			
08/30/97	Barium, dissolved	2.000	0.054	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/10/98	Barium, dissolved	2.000	0.054	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
09/21/98	Barium, dissolved	2.000	0.054	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/18/99	Barium, dissolved	2.000	0.054	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
09/21/99	Barium, dissolved	2.000	0.054	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/21/2000	Barium, dissolved	2.000	0.054	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
06/28/2000	Barium, dissolved	2.000	0.054	NT	0.330	NT	NT	DRY	NT	NT	NT	NT	NT	0.079	0.109	0.402
09/28/2000	Barium, dissolved	2.000	0.054	NT	NT	0.036	NT	DRY	NT	NT	NT	NT	DRY	0.039	0.088	0.473
12/27/2000	Barium, dissolved	2.000	0.054	NT	0.328	NT	NT	dry	NT	NT	NT	NT	NT	0.067	0.103	0.530
03/28/2001	Barium, dissolved	2.000	0.054	NT	0.318	0.035	NT	NT	NT	NT	NT	NT	NT	0.058	0.100	0.210
09/02/2001	Barium, dissolved	2.000	0.054	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/19/2002	Barium, dissolved	2.000	0.054	NT	NT	0.042	NT	Dry	NT	NT	NT	NT	NT	NT	NT	NT
09/19/2002	Barium, dissolved	2.000	0.054	NT	NT	NT	NT	Dry	NT	NT	NT	NT	NT	NT	NT	NT
03/14/2003	Barium, dissolved	2.000	0.054	NT	NT	NT	NT	Dry	NT	NT	NT	NT	NT	NT	NT	NT
09/29/2003	Barium, dissolved	2.000	0.054	NT	NT	NT	NT	Dry	NT	NT	NT	NT	NT	NT	NT	NT
03/08/2004	Barium, dissolved	2.000	0.054	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/27/2004	Barium, dissolved	2.000	0.054	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

Mean	0.0445	0.325333	0.035	0.1395	0.1485	0.15125	0.105667	0.06	0.104	0.1865	0.06075	0.1	0.40375
Standard Deviation (STD)	0.0045	0.005249	0.006764	0.014586	0.0395	0.008584	0.06184	0.005	0.057736	0.016132	0.014601	0.007649	0.120703
Mean + 2 STD	0.0535	0.335832	0.048528	0.168672	0.2275	0.168418	0.229347	0.07	0.219473	0.218765	0.089952	0.115297	0.645156



AMES-STORY ENVIRONMENTAL LANDFILL
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DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD WT	WATER TABLE WELLS												
				U.G.W MW-37	D.G.W MW 6	D.G.W MW 28	D.G.W MW 23	D.G.W MW 24	D.G.W MW 31	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.G.W MW 39	D.G.W MW 40	D.G.W MW 43
	ug/L															
04/23/91	Benzene *	5	1			<1	<1	<1	<1	<1	---	<1				
10/15/91	Benzene *	5	1			<1	<1	---	<1	<1	---	<1				
01/23/92	Benzene *	5	1			<1	<1	---	<1	<1	<1	<1				
03/23/92	Benzene *	5	1			<1	<1	<1	<1	<1	<1	<1				
09/30/92	Benzene *	5	1			NT	NT	NT	NT	NT	NT	NT				
03/05/93	Benzene *	5	1			NT	NT	NT	NT	NT	NT	NT				
09/21/93	Benzene *	5	1			NT	NT	NT	NT	NT	NT	NT				
03/23/94	Benzene *	5	1			NT	NT	NT	NT	NT	NT	NT				
09/16/94	Benzene *	5	1			NT	NT	NT	NT	NT	NT	NT				
03/16/95	Benzene *	5	1			NT	NT	NT	NT	NT	NT	NT				
09/13/95	Benzene *	5	1			NT	NT	NT	NT	NT	NT	NT				
03/28/96	Benzene *	5	1	<1		NT	NT	NT	NT	NT	NT	NT	<1			
06/20/96	Benzene *	5	1	<1		NT	NT	NT	NT	NT	NT	NT	<1			
09/13/96	Benzene *	5	1	<1		NT	NT	Dry	NT	NT	NT	NT	<1			
03/19/97	Benzene *	5	1	NT		NT	NT	NT	NT	NT	NT	NT	NT			
06/18/97	Benzene *	5	1	<1		<1	NT	NT	NT	NT	NT	NT	<1			
08/30/97	Benzene *	5	1	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/10/98	Benzene *	5	1	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
09/21/98	Benzene *	5	1	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/18/99	Benzene *	5	1	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
09/21/99	Benzene *	5	1	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/21/2000	Benzene *	5	1	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
06/28/2000	Benzene *	5	1	NT	<1	NT	NT	DRY	NT	NT	NT	NT	NT	<1	<1	<1
09/28/2000	Benzene *	5	1	NT	<1	<1	NT	DRY	NT	NT	NT	NT	DRY	<1	<1	<1
12/27/2000	Benzene *	5	1	NT	<1	NT	NT	Dry	NT	NT	NT	NT	NT	<1	<1	<1
03/28/2001	Benzene *	5	1	NT	<1	<1	NT	NT	NT	NT	NT	NT	NT	<1	<1	<1
09/02/2001	Benzene *	5	1	NT	NT	<1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/19/2002	Benzene *	5	1	NT	NT	<1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/19/2002	Benzene *	5	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/14/2003	Benzene *	5	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/29/2003	Benzene *	5	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/08/2004	Benzene *	5	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/27/2004	Benzene *	5	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Mean			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Standard Deviation (STD)			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Mean + 2 STD			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

AMES-STORY ENVIRONMENTAL LANDFILL
85-SDP-13-91P
MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD WT	WATER TABLE WELLS												
				U.G.W MW-37	D.G.W MW 6	D.G.W MW 28	D.G.W MW 23	D.G.W MW 24	D.G.W MW 31	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.G.W MW 39	D.G.W MW 40	D.G.W MW 43
04/23/91	Cadmium, dissolved	0.005	0.001			<0.001	<0.001	<0.001	<0.001	<0.001	---	<0.001				
10/15/91	Cadmium, dissolved	0.005	0.001			<0.001	<0.001	---	<0.001	<0.001	---	<0.001				
01/23/92	Cadmium, dissolved	0.005	0.001			<0.001	<0.001	---	<0.001	<0.001	<0.001	<0.001				
03/23/92	Cadmium, dissolved	0.005	0.001			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001				
09/30/92	Cadmium, dissolved	0.005	0.001			NT	NT	NT	NT	NT	NT	NT				
03/05/93	Cadmium, dissolved	0.005	0.001			NT	NT	NT	NT	NT	NT	NT				
09/21/93	Cadmium, dissolved	0.005	0.001			NT	NT	NT	NT	NT	NT	NT				
03/23/94	Cadmium, dissolved	0.005	0.001			NT	NT	NT	NT	NT	NT	NT				
09/16/94	Cadmium, dissolved	0.005	0.001			NT	NT	NT	NT	NT	NT	NT				
03/16/95	Cadmium, dissolved	0.005	0.001			NT	NT	NT	NT	NT	NT	NT				
09/13/95	Cadmium, dissolved	0.005	0.001			NT	NT	NT	NT	NT	NT	NT				
03/28/96	Cadmium, dissolved	0.005	0.001	<0.001		NT	NT	NT	NT	NT	NT	NT	<0.001			
06/20/96	Cadmium, dissolved	0.005	0.001	<0.001		NT	NT	NT	NT	NT	NT	NT	<0.001			
09/13/96	Cadmium, dissolved	0.005	0.001	<0.001		NT	NT	Dry	NT	NT	NT	NT	<0.001			
03/19/97	Cadmium, dissolved	0.005	0.001	<0.001		NT	NT	DRY	NT	NT	NT	NT	<0.001			
06/18/97	Cadmium, dissolved	0.005	0.001	<0.001		<0.001	NT	NT	NT	NT	NT	NT	<0.001			
08/30/97	Cadmium, dissolved	0.005	0.001	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/10/98	Cadmium, dissolved	0.005	0.001	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
09/21/98	Cadmium, dissolved	0.005	0.001	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/18/99	Cadmium, dissolved	0.005	0.001	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
09/21/99	Cadmium, dissolved	0.005	0.001	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/21/2000	Cadmium, dissolved	0.005	0.001	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
06/28/2000	Cadmium, dissolved	0.005	0.001	NT	<0.001	NT	NT	DRY	NT	NT	NT	NT	NT	<0.001	<0.001	<0.001
09/28/2000	Cadmium, dissolved	0.005	0.001	NT	<0.001	<0.001	NT	DRY	NT	NT	NT	NT	NT	<0.001	<0.001	<0.001
12/27/2000	Cadmium, dissolved	0.005	0.001	NT	<0.001	NT	NT	Dry	NT	NT	NT	NT	NT	<0.001	<0.001	<0.001
03/28/2001	Cadmium, dissolved	0.005	0.001	NT	<0.001	<0.001	NT	NT	NT	NT	NT	NT	NT	<0.001	<0.001	<0.001
09/02/2001	Cadmium, dissolved	0.005	0.001	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/19/2002	Cadmium, dissolved	0.005	0.001	NT	NT	<0.001	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/19/2002	Cadmium, dissolved	0.005	0.001	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/14/2003	Cadmium, dissolved	0.005	0.001	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/29/2003	Cadmium, dissolved	0.005	0.001	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/08/2004	Cadmium, dissolved	0.005	0.001	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/27/2004	Cadmium, dissolved	0.005	0.001	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Mean			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Standard Deviation (STD)			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Mean + 2 STD			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

AMES-STORY ENVIRONMENTAL LANDFILL
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MONITORING WELL SAMPLING RESULTS

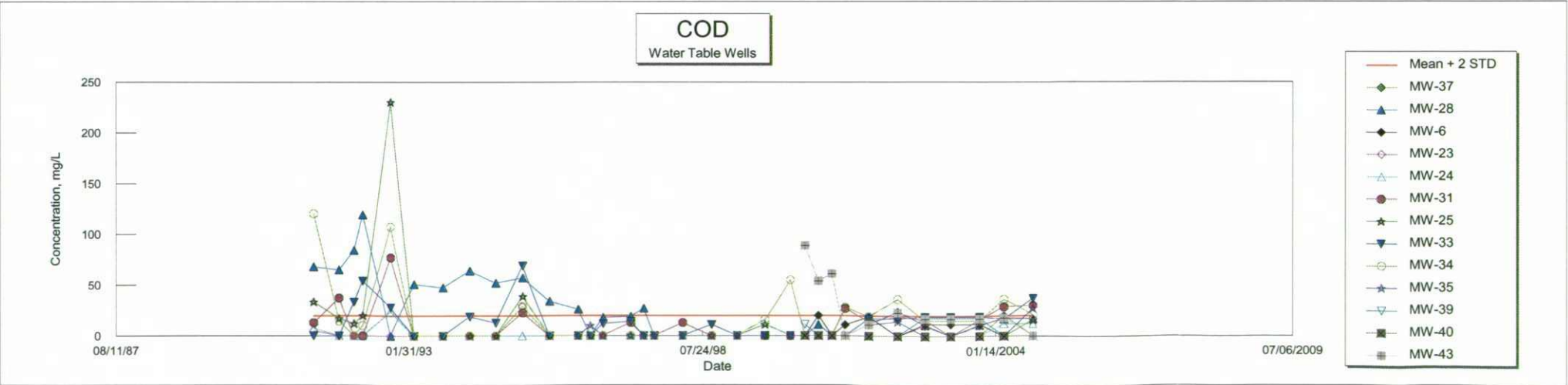
DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD WT	WATER TABLE WELLS												
				U.G.W MW-37	D.G.W MW 6	D.G.W MW 28	D.G.W MW 23	D.G.W MW 24	D.G.W MW 31	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.G.W MW 39	D.G.W MW 40	D.G.W MW 43
	ug/L															
04/23/91	Carbon tetrachloride *	5	0.3			<1	<1	<1	<1	<1	---	<1				
10/15/91	Carbon tetrachloride *	5	0.3			<1	<1	---	<1	<1	---	<1				
01/23/92	Carbon tetrachloride *	5	0.3			<1	<1	---	<1	<1	<1	<1				
03/23/92	Carbon tetrachloride *	5	0.3			<1	<1	<1	<1	<1	<1	<1				
09/30/92	Carbon tetrachloride *	5	0.3			NT	NT	NT	NT	NT	NT	NT				
03/05/93	Carbon tetrachloride *	5	0.3			NT	NT	NT	NT	NT	NT	NT				
09/21/93	Carbon tetrachloride *	5	0.3			NT	NT	NT	NT	NT	NT	NT				
03/23/94	Carbon tetrachloride *	5	0.3			NT	NT	NT	NT	NT	NT	NT				
09/16/94	Carbon tetrachloride *	5	0.3			NT	NT	NT	NT	NT	NT	NT				
03/16/95	Carbon tetrachloride *	5	0.3			NT	NT	NT	NT	NT	NT	NT				
09/13/95	Carbon tetrachloride *	5	0.3			NT	NT	NT	NT	NT	NT	NT				
03/28/96	Carbon tetrachloride *	5	0.3	<0.3		NT	NT	NT	NT	NT	NT	NT	<0.3			
06/20/96	Carbon tetrachloride *	5	0.3	<0.3		NT	NT	NT	NT	NT	NT	NT	<0.3			
09/13/96	Carbon tetrachloride *	5	0.3	<0.3		NT	NT	Dry	NT	NT	NT	NT	<0.3			
03/19/97	Carbon tetrachloride *	5	0.3	NT		NT	NT	NT	NT	NT	NT	NT	NT			
06/18/97	Carbon tetrachloride *	5	0.3	<0.3		<0.3	NT	NT	NT	NT	NT	NT	<0.3			
08/30/97	Carbon tetrachloride *	5	0.3	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/10/98	Carbon tetrachloride *	5	0.3	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
09/21/98	Carbon tetrachloride *	5	0.3	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/18/99	Carbon tetrachloride *	5	0.3	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
09/21/99	Carbon tetrachloride *	5	0.3	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/21/2000	Carbon tetrachloride *	5	0.3	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
06/28/2000	Carbon tetrachloride *	5	0.3	NT	<0.3	NT	NT	DRY	NT	NT	NT	NT	NT	<0.3	<0.3	<0.3
09/28/2000	Carbon tetrachloride *	5	0.3	NT	<0.3	<0.3	NT	DRY	NT	NT	NT	NT	DRY	<0.3	<0.3	<0.3
12/27/2000	Carbon tetrachloride *	5	0.3	NT	<0.3	NT	NT	Dry	NT	NT	NT	NT	NT	<0.3	<0.3	<0.3
03/28/2001	Carbon tetrachloride *	5	0.3	NT	<0.3	<0.3	NT	NT	NT	NT	NT	NT	NT	<0.3	<0.3	<0.3
09/02/2001	Carbon tetrachloride *	5	0.3	NT	NT	<0.3	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/19/2002	Carbon tetrachloride *	5	0.3	NT	NT	<0.3	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/19/2002	Carbon tetrachloride *	5	0.3	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/14/2003	Carbon tetrachloride *	5	0.3	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/29/2003	Carbon tetrachloride *	5	0.3	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/08/2004	Carbon tetrachloride *	5	0.3	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/27/2004	Carbon tetrachloride *	5	0.3	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Mean			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Standard Deviation (STD)			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Mean + 2 STD			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

AMES-STORY ENVIRONMENTAL LANDFILL
85-SDP-13-91P
MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD WT	WATER TABLE WELLS												
				U.G.W MW-37	D.G.W MW 6	D.G.W MW 28	D.G.W MW 23	D.G.W MW 24	D.G.W MW 31	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.G.W MW 39	D.G.W MW 40	D.G.W MW 43
04/23/91	Chemical Oxygen Demand mg/L	--	20			67.8	5.2	7.5	12.8	33.4	---	120.1				
10/15/91	Chemical Oxygen Demand	--	20			64.8	<10	---	37.2	17.2	---	14.3				
01/23/92	Chemical Oxygen Demand	--	20			84.1	<10	---	<10	12	33.4	<10				
03/23/92	Chemical Oxygen Demand	--	20			119	<10	<10	<10	20	54	10				
09/30/92	Chemical Oxygen Demand	--	20			---	<10	24	77	230	28	107				
03/05/93	Chemical Oxygen Demand	--	20			50.8	<10	---	<10	<10	<10	<10				
09/21/93	Chemical Oxygen Demand	--	20			47.3	<10	<10	<10	<10	<10	<10				
03/23/94	Chemical Oxygen Demand	--	20			64	<10	<10	<10	<10	19	<10				
09/16/94	Chemical Oxygen Demand	--	20			52	<10	NT	<10	<10	13	<10				
03/16/95	Chemical Oxygen Demand	--	20			57	29	NT	23	39	69	29				
09/13/95	Chemical Oxygen Demand	--	20			34	<10	NT	<10	<10	<10	<10				
03/28/96	Chemical Oxygen Demand	--	20	<10		26	<10	NT	<10	<10	<10	<10	<10			
06/20/96	Chemical Oxygen Demand	--	20	<10		NT	NT	NT	NT	NT	NT	NT	10			
09/13/96	Chemical Oxygen Demand	--	20	<10		18	<10	Dry	<10	<10	12	<10	<10			
03/19/97	Chemical Oxygen Demand	--	20	<10		19	<10	<10	13	<10	14	<10	<10			
06/18/97	Chemical Oxygen Demand	--	20	<10		27	NT	NT	NT	NT	NT	NT	<10			
08/30/97	Chemical Oxygen Demand	--	20	<10		<10	<10	DRY	<10	<10	<10	<10	<10			
03/10/98	Chemical Oxygen Demand	--	20	<10		<10	<10	DRY	13	<10	<10	<10	<10			
09/21/98	Chemical Oxygen Demand	--	20	<10		<10	<10	DRY	<10	<10	11	<10	<10			
03/18/99	Chemical Oxygen Demand	--	20	<10		<10	<10	DRY	<10	<10	<10	<10	<10			
09/21/99	Chemical Oxygen Demand	--	20	<10		<10	<10	DRY	<10	11	<10	16	<10			
03/21/2000	Chemical Oxygen Demand	--	20	NT		<10	<10	DRY	<10	<10	<10	55	NT			
06/28/2000	Chemical Oxygen Demand	--	20	NT	<10	NT	NT	DRY	NT	NT	NT	NT	NT	11	<10	89
09/28/2000	Chemical Oxygen Demand	--	20	<10	20	11	<10	DRY	<10	<10	<10	<10	DRY	<10	<10	54
12/27/2000	Chemical Oxygen Demand	--	20	NT	<10	NT	NT	Dry	NT	NT	NT	NT	NT	<10	<10	61
03/28/2001	Chemical Oxygen Demand	--	20	<10	11	<10	<10	<10	27	<10	<10	28	<10	<10	<10	<10
09/02/2001	Chemical Oxygen Demand	--	20	<10	19	11	<10	NT	14	<10	17	19	11	<10	<10	11
03/19/2002	Chemical Oxygen Demand	--	20	<10	<10	24	<10	Dry	19	<10	17	36	14	<10	<10	23
09/19/2002	Chemical Oxygen Demand	--	20	<10	12	11	10	Dry	16	<10	19	15	<10	18	<10	17
03/14/2003	Chemical Oxygen Demand	--	20	<10	12	28	<10	Dry	20	<10	19	15	<10	18	<10	17
09/29/2003	Chemical Oxygen Demand	--	20	<10	12	11	10	Dry	16	<10	19	15	<10	18	<10	17
03/08/2004	Chemical Oxygen Demand	--	20	20	<10	17	18	12	29	<10	17	36	<10	<10	<10	18
09/27/2004	Chemical Oxygen Demand	--	20	<10	<10	17	17	12	30	16	37	21	27	<10	<10	<10

repeats

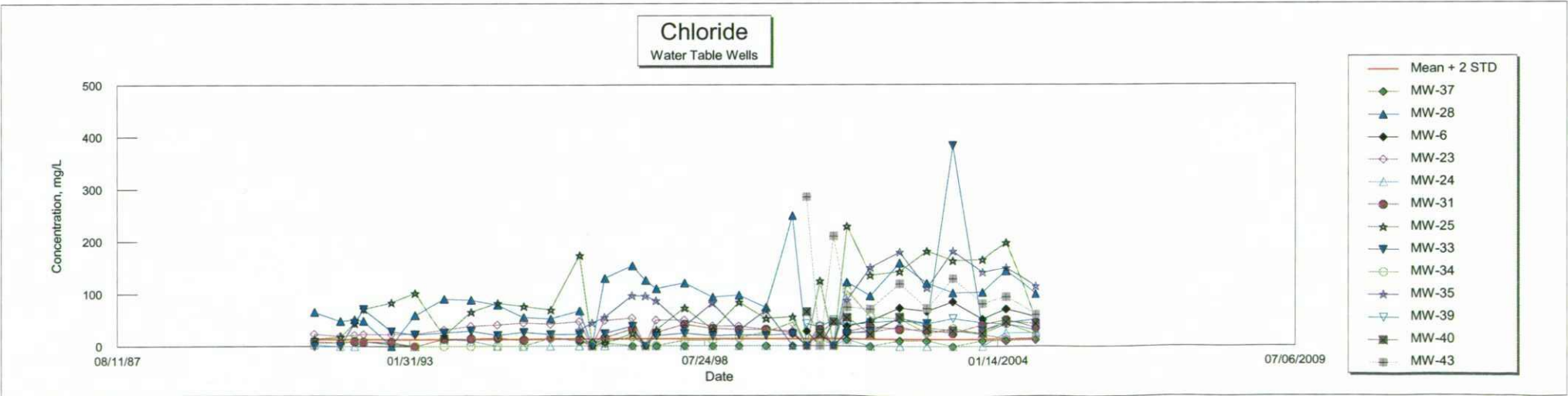
Mean	20	14.33333	39.65714	14.86667	13.875	25.15385	47.325	24.9	35.76	15.5	16.25	ERR	34.11111
Standard Deviation (STD)	0	3.681787	28.24565	7.691265	6.12755	16.77308	69.67438	15.74484	32.63008	6.800735	3.031089	ERR	25.6621
Mean + 2 STD	20	21.69691	96.14844	30.2492	26.1301	58.70001	186.6738	56.38968	101.0202	29.10147	22.31218	ERR	85.4353



AMES-STORY ENVIRONMENTAL LANDFILL
85-SDP-13-91P
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DATE	PARAMETER	Secondary MCL LEVEL	MEAN + 2 STD WT	WATER TABLE WELLS													D.G.W MW 39	D.G.W MW 40	D.G.W MW 43
				U.G.W MW-37	D.G.W MW 6	D.G.W MW 28	D.G.W MW 23	D.G.W MW 24	D.G.W MW 31	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35						
mg/L																			
04/23/91	Chloride	250	13.68553			65	23.5	2.5	9	13.5	---	6							
10/15/91	Chloride	250	13.68553			47.6	19.33	---	6.6	17.4	---	6.6							
01/23/92	Chloride	250	13.68553			50.9	21.5	---	8.9	43.5	44.6	10							
03/23/92	Chloride	250	13.68553			48.1	23.2	8.5	8.5	70.8	70.8	9							
09/30/92	Chloride	250	13.68553			---	23	5	8	83	28	3							
03/05/93	Chloride	250	13.68553			59.2	23.5	---	<10	101	22.5	<10							
09/21/93	Chloride	250	13.68553			90	31.8	13.7	13.7	20	26	<10							
03/23/94	Chloride	250	13.68553			88.6	38.7	10.4	14.1	65.1	29.2	<10							
09/16/94	Chloride	250	13.68553			79	41	NT	16	82	21	<10							
03/16/95	Chloride	250	13.68553			55	45	NT	12	76	27	<10							
09/13/95	Chloride	250	13.68553			52	42	NT	15	69	22	15							
03/28/96	Chloride	250	13.68553	9		67	47	NT	13	173	22	8.9	30						
06/20/96	Chloride	250	13.68553	6.7		NT	NT	NT	NT	NT	NT	NT	44						
09/13/96	Chloride	250	13.68553	5.1		129	48.6	Dry	14.9	5.3	23.6	7.1	54.2						
03/19/97	Chloride	250	13.68553	<10		153	53	<10	32	23	38	17	96						
06/18/97	Chloride	250	13.68553	<10		125	NT	NT	NT	NT	NT	NT	95						
08/30/97	Chloride	250	13.68553	<10		109	49	DRY	25	30	19	<10	86						
03/10/98	Chloride	250	13.68553	<10		120	49	DRY	41	72	24	10	37						
09/21/98	Chloride	250	13.68553	<10		93	38	DRY	33	31	19	10	81						
03/18/99	Chloride	250	13.68553	<10		97	38	DRY	31	83	21	15	29						
09/21/99	Chloride	250	13.68553	<10		73	31	DRY	31	52	20	26	67						
03/21/2000	Chloride	250	13.68553	NT		249	28	DRY	25	55	23	45	NT						
06/28/2000	Chloride	250	13.68553	NT	28	NT	NT	DRY	NT	NT	NT	NT	NT	42	65	285			
09/28/2000	Chloride	250	13.68553	<10	59	78	39	DRY	31	124	24	13	DRY	36	22	226			
12/27/2000	Chloride	250	13.68553	NT	46	NT	NT	Dry	NT	NT	NT	NT	NT	49	46	210			
03/28/2001	Chloride	250	13.68553	12	38	122	26	12	27	229	24	105	87	40	54	74			
09/02/2001	Chloride	250	13.68553	<10	48	96	26	NT	38	135	29	56	150	45	23	71			
03/19/2002	Chloride	250	13.68553	10	73	159	37	Dry	32	142	53	52	179	49	56	119			
09/19/2002	Chloride	250	13.68553	10	67	120	26	Dry	31	181	44	25	111	43	35	72			
03/14/2003	Chloride	250	13.68553	<10	85	102	30	Dry	25	163	383	34	181	53	30	129			
09/29/2003	Chloride	250	13.68553	10	52	103	22	Dry	41	165	30	23	141	45	25	81			
03/08/2004	Chloride	250	13.68553	10	71	143	14	25	50	197	45	43	149	42	47	94			
09/27/2004	Chloride	250	13.68553	12	56	100	15	25	35	49	51	21	114	30	43	60			

Mean	9.422222	56.4	99.83571	32.72862	12.7625	23.84643	87.95172	43.84074	24.37391	96.17778	43.09091	40.54545	119.5
Standard Deviation (STD)	2.131654	16.62047	42.60073	10.92421	7.828623	11.85669	60.50629	67.68291	22.85033	47.39765	6.097012	13.9177	69.29827
Mean + 2 STD	13.68553	89.64094	185.0372	54.57704	28.41975	47.55981	208.9643	179.2066	70.07457	190.9731	55.28493	68.38086	258.0965



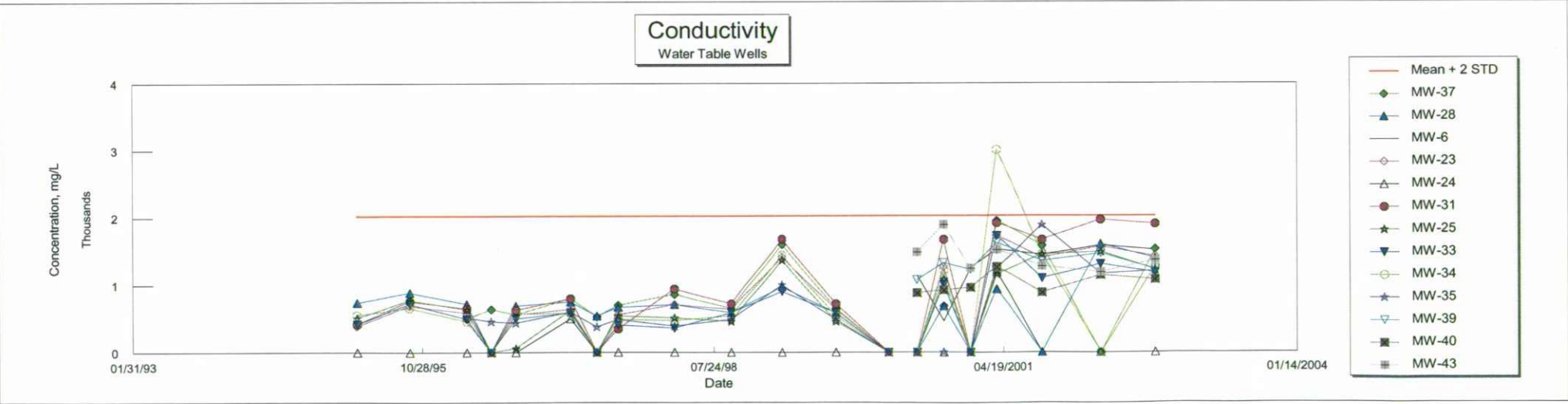
AMES-STORY ENVIRONMENTAL LANDFILL
85-SDP-13-91P
MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD WT	WATER TABLE WELLS												
				U.G.W MW-37	D.G.W MW 6	D.G.W MW 28	D.G.W MW 23	D.G.W MW 24	D.G.W MW 31	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.G.W MW 39	D.G.W MW 40	D.G.W MW 43
	mg/L															
04/23/91	Chromium, dissolved	0.1	0.03			<0.03	<0.03	<0.03	<0.03	<0.03	---	<0.03				
10/15/91	Chromium, dissolved	0.1	0.03			<0.03	<0.03	---	<0.03	<0.03	---	<0.03				
01/23/92	Chromium, dissolved	0.1	0.03			<0.03	<0.03	---	<0.03	<0.03	<0.03	<0.03				
03/23/92	Chromium, dissolved	0.1	0.03			<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03				
09/30/92	Chromium, dissolved	0.1	0.03			NT	NT	NT	NT	NT	NT	NT				
03/05/93	Chromium, dissolved	0.1	0.03			NT	NT	NT	NT	NT	NT	NT				
09/21/93	Chromium, dissolved	0.1	0.03			NT	NT	NT	NT	NT	NT	NT				
03/23/94	Chromium, dissolved	0.1	0.03			NT	NT	NT	NT	NT	NT	NT				
09/16/94	Chromium, dissolved	0.1	0.03			NT	NT	NT	NT	NT	NT	NT				
03/16/95	Chromium, dissolved	0.1	0.03			NT	NT	NT	NT	NT	NT	NT				
09/13/95	Chromium, dissolved	0.1	0.03			NT	NT	NT	NT	NT	NT	NT				
03/28/96	Chromium, dissolved	0.1	0.03	<0.03		NT	NT	NT	NT	NT	NT	NT	<0.03			
06/20/96	Chromium, dissolved	0.1	0.03	<0.03		NT	NT	NT	NT	NT	NT	NT	<0.03			
09/13/96	Chromium, dissolved	0.1	0.03	<0.03		NT	NT	Dry	NT	NT	NT	NT	<0.03			
03/19/97	Chromium, dissolved	0.1	0.03	NT		NT	NT	NT	NT	NT	NT	NT	NT			
06/18/97	Chromium, dissolved	0.1	0.03	<0.03		<0.03	NT	NT	NT	NT	NT	NT	<0.03			
08/30/97	Chromium, dissolved	0.1	0.03	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/10/98	Chromium, dissolved	0.1	0.03	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
09/21/98	Chromium, dissolved	0.1	0.03	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/18/99	Chromium, dissolved	0.1	0.03	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
09/21/99	Chromium, dissolved	0.1	0.03	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/21/2000	Chromium, dissolved	0.1	0.03	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
06/28/2000	Chromium, dissolved	0.1	0.03	NT	<0.03	NT	NT	DRY	NT	NT	NT	NT	NT	<0.03	<0.03	<0.03
09/28/2000	Chromium, dissolved	0.1	0.03	NT	NT	<0.03	NT	DRY	NT	NT	NT	NT	DRY	<0.03	<0.03	<0.03
12/27/2000	Chromium, dissolved	0.1	0.03	NT	<0.03	NT	NT	Dry	NT	NT	NT	NT	NT	<0.03	<0.03	<0.03
03/28/2001	Chromium, dissolved	0.1	0.03	NT	<0.03	<0.03	NT	NT	NT	NT	NT	NT	NT	<0.03	<0.03	<0.03
09/02/2001	Chromium, dissolved	0.1	0.03	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/19/2002	Chromium, dissolved	0.1	0.03	NT	NT	<0.005	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/19/2002	Chromium, dissolved	0.1	0.03	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/14/2003	Chromium, dissolved	0.1	0.03	NT	NT	NT	NT	DRY	NT	NT	NT	NT	NT	NT	NT	NT
09/29/2003	Chromium, dissolved	0.1	0.03	NT	NT	NT	NT	DRY	NT	NT	NT	NT	NT	NT	NT	NT
03/08/2004	Chromium, dissolved	0.1	0.03	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/27/2004	Chromium, dissolved	0.1	0.03	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Mean			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Standard Deviation (STD)			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Mean + 2 STD			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

AMES-STORY ENVIRONMENTAL LANDFILL
85-SDP-13-91P
MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD WT	WATER TABLE WELLS												
				U.G.W MW-37	D.G.W MW 6	D.G.W MW 28	D.G.W MW 23	D.G.W MW 24	D.G.W MW 31	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.G.W MW 39	D.G.W MW 40	D.G.W MW 43
03/16/95	Conductivity, mv	--	2028.477			740	390	DRY	420	510	420	550				
09/13/95	Conductivity, mv	--	2028.477			890	690	DRY	760	770	720	660				
03/28/96	Conductivity, mv	--	2028.477	500		720	590	DRY	650	640	500	460	520			
06/20/96	Conductivity, mv	--	2028.477	640		NT	NT	NT	NT	NT	NT	NT	460			
09/13/96	Conductivity, mv	--	2028.477	560		690	560	Dry	630	60	500	570	440			
03/19/97	Conductivity, mv	--	2028.477	800		750	640	500	800	620	590	580	600			
06/18/97	Conductivity, mv	--	2028.477	530		540	NT	NT	NT	NT	NT	NT	380			
08/30/97	Conductivity, mv	--	2028.477	700		670	560	DRY	350	540	410	490	490			
03/10/98	Conductivity, mv	--	2028.477	860		710	710	DRY	940	510	360	470	390			
09/21/98	Conductivity, mv	--	2028.477	650		590	640	DRY	720	460	590	540	490			
03/18/99	Conductivity, mv	--	2028.477	1600		976	1414	DRY	1683	1370	902	1438	1005			
09/21/99	Conductivity, mv	--	2028.477	650		590	640	DRY	720	460	590	540	490			
03/21/2000	Conductivity, mv	--	2028.477	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
06/28/2000	Conductivity, mv	--	2028.477	NT	1138	NT	NT	DRY	NT	NT	NT	NT	NT	1074	884	1487
09/28/2000	Conductivity, mv	--	2028.477	688	466	686	1268	DRY	1673	1083	1009	1209	DRY	1324	923	1895
12/27/2000	Conductivity, mv	--	2028.477	NT	1252	NT	NT	Dry	NT	NT	NT	NT	NT	1224	960	1246
03/28/2001	Conductivity, mv	--	2028.477	1949	1532	938	1730	1190	1919	1161	1730	3000	1246	1622	1266	1520
09/02/2001	Conductivity, mv	--	2028.477	1583	1446	NT	1404	NT	1670	1455	1098	1455	1889	1354	885	1277
03/19/2002	Conductivity, mv	--	2028.477	NT	1590	1607	1570	Dry	1966	1490	1313	NT	1167	1470	1146	1190
09/19/2002	Conductivity, mv	--	2028.477	1530	1521	1395	1420	Dry	1903	1225	1182	1287	1209	1235	1081	1368
03/14/2003	Conductivity, mv	--	2028.477	1129	1379	1358	1060	Dry	928	833	732	1020	709	1201	926	
09/29/2003	Conductivity, mv	--	2028.477	1185	1018	890	1159	Dry	1328	1241	890	1055	886	1035	819	1142
03/08/2004	Conductivity, mv	--	2028.477	1647	1225	1294	1460	1138	1947	1360	1154	1237	1124	1446	955	1192
09/27/2004	Conductivity, mv	--	2028.477	1819	1673	1580	1398	1138	1870	1546	1300	1218	995	1588	1310	1254

Mean	1056.667	1294.545	927.0526	1015.947	991.5	1204.053	912.3158	841.5789	987.7222	805	1324.818	1014.091	1357.1
Standard Deviation (STD)	485.9052	325.0702	336.1535	418.7129	284.5606	571.8442	430.4566	368.5587	603.9005	400.2402	184.5544	155.8032	215.3376
Mean + 2 STD	2028.477	1944.686	1599.36	1853.373	1560.621	2347.741	1773.229	1578.696	2195.523	1605.48	1693.927	1325.697	1787.775



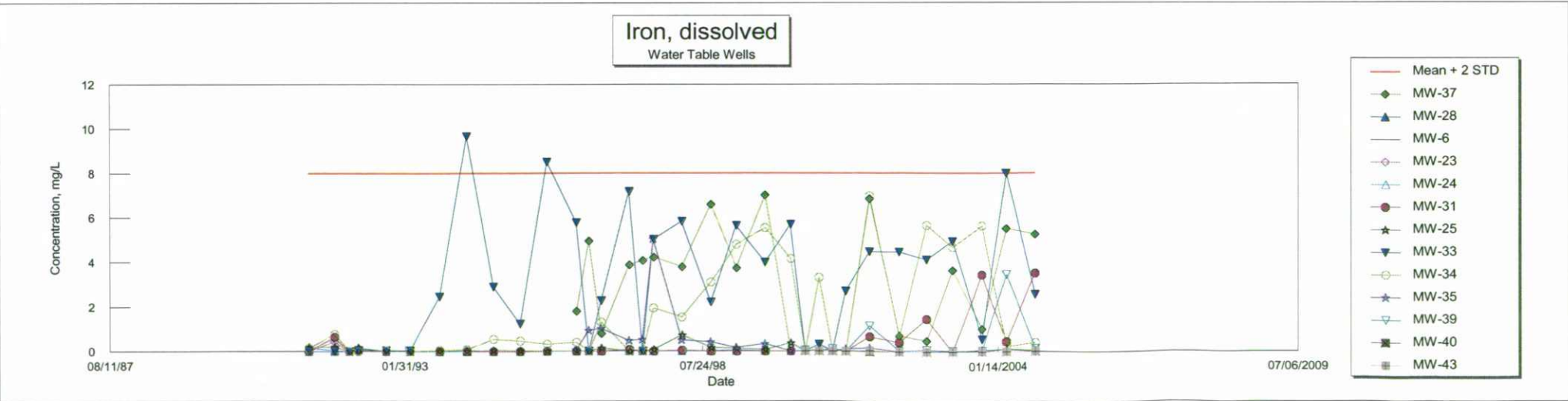
AMES-STORY ENVIRONMENTAL LANDFILL
85-SDP-13-91P
MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD WT	WATER TABLE WELLS												
				U.G.W MW-37	D.G.W MW 6	D.G.W MW 28	D.G.W MW 23	D.G.W MW 24	D.G.W MW 31	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.G.W MW 39	D.G.W MW 40	D.G.W MW 43
04/23/91	Copper, dissolved	1.3	0.03			<0.03	<0.03	<0.03	<0.03	<0.03	---	<0.03				
10/15/91	Copper, dissolved	1.3	0.03			<0.03	<0.03	---	<0.03	<0.03	---	<0.03				
01/23/92	Copper, dissolved	1.3	0.03			<0.03	<0.03	---	<0.03	<0.03	<0.03	<0.03				
03/23/92	Copper, dissolved	1.3	0.03			<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03				
09/30/92	Copper, dissolved	1.3	0.03			NT	NT	NT	NT	NT	NT	NT				
03/05/93	Copper, dissolved	1.3	0.03			NT	NT	NT	NT	NT	NT	NT				
09/21/93	Copper, dissolved	1.3	0.03			NT	NT	NT	NT	NT	NT	NT				
03/23/94	Copper, dissolved	1.3	0.03			NT	NT	NT	NT	NT	NT	NT				
09/16/94	Copper, dissolved	1.3	0.03			NT	NT	NT	NT	NT	NT	NT				
03/16/95	Copper, dissolved	1.3	0.03			NT	NT	NT	NT	NT	NT	NT				
09/13/95	Copper, dissolved	1.3	0.03			NT	NT	NT	NT	NT	NT	NT				
03/28/96	Copper, dissolved	1.3	0.03	<0.03		NT	NT	NT	NT	NT	NT	NT	<0.03			
06/20/96	Copper, dissolved	1.3	0.03	<0.03		NT	NT	NT	NT	NT	NT	NT	<0.03			
09/13/96	Copper, dissolved	1.3	0.03	<0.03		NT	NT	Dry	NT	NT	NT	NT	<0.03			
03/19/97	Copper, dissolved	1.3	0.03	NT		NT	NT	NT	NT	NT	NT	NT	NT			
06/18/97	Copper, dissolved	1.3	0.03	<0.03		<0.03	NT	NT	NT	NT	NT	NT	<0.03			
08/30/97	Copper, dissolved	1.3	0.03	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/10/98	Copper, dissolved	1.3	0.03	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
09/21/98	Copper, dissolved	1.3	0.03	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/18/99	Copper, dissolved	1.3	0.03	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
09/21/99	Copper, dissolved	1.3	0.03	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/21/2000	Copper, dissolved	1.3	0.03	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
06/28/2000	Copper, dissolved	1.3	0.03	NT	<0.03	NT	NT	DRY	NT	NT	NT	NT	NT	<0.03	<0.03	<0.03
09/28/2000	Copper, dissolved	1.3	0.03	NT	NT	<0.03	NT	DRY	NT	NT	NT	NT	DRY	<0.03	<0.03	<0.03
12/27/2000	Copper, dissolved	1.3	0.03	NT	<0.03	NT	NT	Dry	NT	NT	NT	NT	NT	<0.03	<0.03	<0.03
03/28/2001	Copper, dissolved	1.3	0.03	NT	<0.03	<0.03	NT	NT	NT	NT	NT	NT	NT	<0.03	<0.03	<0.03
09/02/2001	Copper, dissolved	1.3	0.03	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/19/2002	Copper, dissolved	1.3	0.03	NT	NT	<0.005	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/19/2002	Copper, dissolved	1.3	0.03	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/14/2003	Copper, dissolved	1.3	0.03	NT	NT	NT	NT	DRY	NT	NT	NT	NT	NT	NT	NT	NT
09/29/2003	Copper, dissolved	1.3	0.03	NT	NT	NT	NT	DRY	NT	NT	NT	NT	NT	NT	NT	NT
03/08/2004	Copper, dissolved	1.3	0.03	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/27/2004	Copper, dissolved	1.3	0.03	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Mean			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Standard Deviation (STD)			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Mean + 2 STD			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

AMES-STORY ENVIRONMENTAL LANDFILL
85-SDP-13-91P
MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD WT	WATER TABLE WELLS												
				U.G.W MW-37	D.G.W MW 6	D.G.W MW 28	D.G.W MW 23	D.G.W MW 24	D.G.W MW 31	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.G.W MW 39	D.G.W MW 40	D.G.W MW 43
04/23/91	Iron, dissolved	--	8.004717			0.159	<0.03	<0.03	<0.03	0.177	---	0.133				
10/15/91	Iron, dissolved	--	8.004717			0.035	0.452	---	0.636	0.205	---	0.767				
01/23/92	Iron, dissolved	--	8.004717			<0.03	<0.03	---	<0.03	<0.03	<0.03	<0.03				
03/23/92	Iron, dissolved	--	8.004717			0.164	<0.03	0.076	0.068	0.121	0.052	<0.03				
09/30/92	Iron, dissolved	--	8.004717			---	<0.03	<0.03	<0.03	<0.03	0.033	0.043				
03/05/93	Iron, dissolved	--	8.004717			<0.03	<0.03	---	<0.03	<0.03	0.035	<0.03				
09/21/93	Iron, dissolved	--	8.004717			<0.03	<0.03	<0.03	<0.03	<0.03	2.46	0.05				
03/23/94	Iron, dissolved	--	8.004717			<0.03	<.03	0.058	<0.03	<0.03	9.65	0.084				
09/16/94	Iron, dissolved	--	8.004717			<0.03	<.03	NT	<0.03	0.05	2.9	0.55				
03/16/95	Iron, dissolved	--	8.004717			<0.03	<.03	NT	<0.03	0.038	1.24	0.47				
09/13/95	Iron, dissolved	--	8.004717			<0.03	<.03	NT	<0.03	<0.03	8.5	0.317				
03/28/96	Iron, dissolved	--	8.004717	1.8		<0.03	<0.03	NT	<0.03	<0.03	5.77	0.386	0.067			
06/20/96	Iron, dissolved	--	8.004717	4.94		NT	NT	NT	NT	NT	NT	NT	0.927			
09/13/96	Iron, dissolved	--	8.004717	0.793		<0.03	<0.03	Dry	<0.03	0.134	2.27	1.3	1.02			
03/19/97	Iron, dissolved	--	8.004717	3.87		0.032	<0.03	<0.03	0.072	<0.03	7.18	<0.03	0.484			
06/18/97	Iron, dissolved	--	8.004717	4.07		<0.03	NT	NT	NT	NT	NT	NT	0.523			
08/30/97	Iron, dissolved	--	8.004717	4.22		<0.03	<0.03	DRY	<0.03	0.076	5.02	1.93	5.05			
03/10/98	Iron, dissolved	--	8.004717	3.78		<0.03	<0.03	DRY	0.033	0.717	5.83	1.52	0.5			
09/21/98	Iron, dissolved	--	8.004717	6.59		<0.03	<0.03	DRY	<0.03	0.166	2.2	3.09	0.415			
03/18/99	Iron, dissolved	--	8.004717	3.73		0.044	<0.03	DRY	<0.03	0.131	5.64	4.78	0.162			
09/21/99	Iron, dissolved	--	8.004717	7.01		<0.03	<0.03	DRY	<0.03	0.076	3.99	5.53	0.337			
03/21/2000	Iron, dissolved	--	8.004717	NT		<0.03	<0.03	DRY	<0.03	0.371	5.69	4.15	NT			
06/28/2000	Iron, dissolved	--	8.004717	NT	<0.03	NT	NT	DRY	NT	NT	NT	NT	NT	0.033	<0.03	<0.03
09/28/2000	Iron, dissolved	--	8.004717	0.067	<0.03	<0.03	<0.03	DRY	<0.03	<0.03	0.303	3.3	DRY	<0.03	<0.03	<0.03
12/27/2000	Iron, dissolved	--	8.004717	NT	<0.03	NT	NT	Dry	NT	NT	NT	NT	NT	0.109	<0.03	<0.03
03/28/2001	Iron, dissolved	--	8.004717	<0.03	<0.03	0.039	<0.03	<0.03	<0.03	<0.03	2.7	<0.03	0.108	<0.03	<0.03	<0.03
09/02/2001	Iron, dissolved	--	8.004717	6.85	<0.03	<0.03	<0.03	NT	0.672	<0.03	4.47	6.97	0.168	1.15	<0.03	0.044
03/19/2002	Iron, dissolved	--	8.004717	0.713	<0.03	<0.03	<0.03	Dry	0.41	<0.03	4.46	0.654	<0.03	0.04	<0.03	<0.03
09/19/2002	Iron, dissolved	--	8.004717	0.496	<0.03	<0.03	<0.03	Dry	1.46	<0.03	4.12	5.65	<0.03	0.087	<0.03	<0.03
03/14/2003	Iron, dissolved	--	8.004717	3.64	0.035	<0.03	<0.03	Dry	<0.03	<0.03	4.95	4.67	<0.03	0.041	<0.03	<0.03
09/29/2003	Iron, dissolved	--	8.004717	1.02	<0.030	<0.03	<0.030	Dry	3.44	<0.030	0.556	5.63	0.078	0.041	<0.030	<0.030
03/08/2004	Iron, dissolved	--	8.004717	5.52	<0.030	<0.03	0.033	<0.03	0.463	0.121	7.99	0.231	0.109	3.46	<0.030	<0.030
09/27/2004	Iron, dissolved	--	8.004717	5.25	<0.030	<0.03	<0.030	<0.03	3.51	0.034	2.56	0.39	<0.030	0.136	<0.030	<0.030

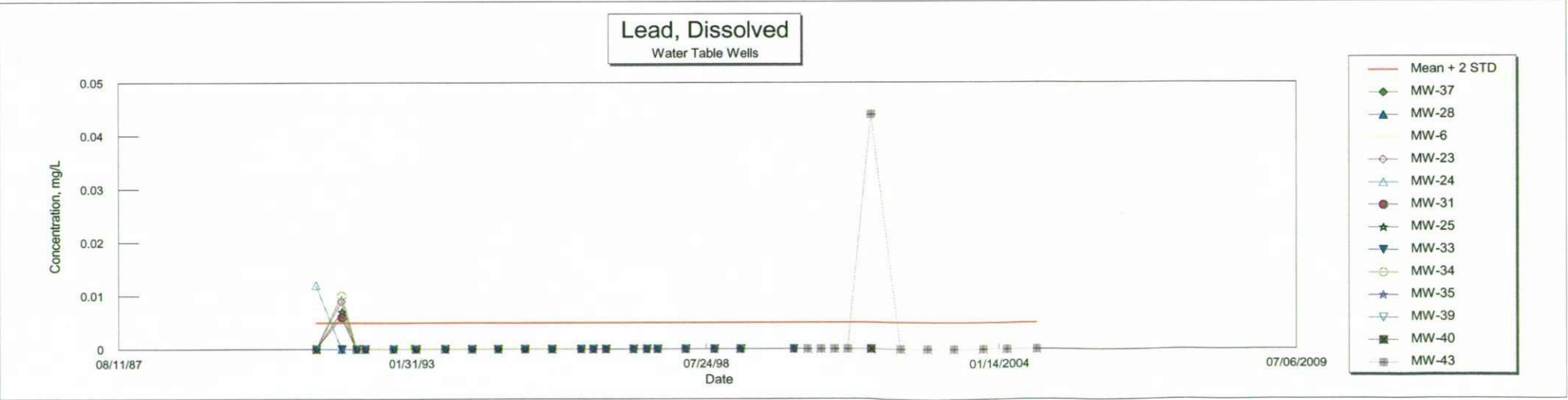
Mean	3.5755	0.035	0.078833	0.452	0.067	1.0764	0.172643	3.868038	2.191458	0.710571	0.566333	ERR	0.044
Standard Deviation (STD)	2.214608	0	0.058587	0	0.009	1.262869	0.172464	2.674231	2.232227	1.238248	1.077626	ERR	0
Mean + 2 STD	8.004717	0.035	0.196008	0.452	0.085	3.602138	0.517571	9.216501	6.655912	3.187068	2.721585	ERR	0.044



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DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD WT	WATER TABLE WELLS												
				U.G.W MW-37	D.G.W MW 6	D.G.W MW 28	D.G.W MW 23	D.G.W MW 24	D.G.W MW 31	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.G.W MW 39	D.G.W MW 40	D.G.W MW 43
04/23/91	Lead, dissolved	0.015	0.005			<0.005	<0.005	0.012	<0.005	<0.005	---	<0.005				
10/15/91	Lead, dissolved	0.015	0.005			<0.005	0.009	---	0.006	0.007	---	0.01				
01/23/92	Lead, dissolved	0.015	0.005			<0.005	<0.005	---	<0.005	<0.005	<0.005	<0.005				
03/23/92	Lead, dissolved	0.015	0.005			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005				
09/30/92	Lead, dissolved	0.015	0.005			NT	NT	NT	NT	NT	NT	NT				
03/05/93	Lead, dissolved	0.015	0.005			NT	NT	NT	NT	NT	NT	NT				
09/21/93	Lead, dissolved	0.015	0.005			NT	NT	NT	NT	NT	NT	NT				
03/23/94	Lead, dissolved	0.015	0.005			NT	NT	NT	NT	NT	NT	NT				
09/16/94	Lead, dissolved	0.015	0.005			NT	NT	NT	NT	NT	NT	NT				
03/16/95	Lead, dissolved	0.015	0.005			NT	NT	NT	NT	NT	NT	NT				
09/13/95	Lead, dissolved	0.015	0.005			NT	NT	NT	NT	NT	NT	NT				
03/28/96	Lead, dissolved	0.015	0.005	<0.005		NT	NT	NT	NT	NT	NT	NT	<0.005			
06/20/96	Lead, dissolved	0.015	0.005	<0.005		NT	NT	NT	NT	NT	NT	NT	<0.005			
09/13/96	Lead, dissolved	0.015	0.005	<0.005		NT	NT	Dry	<0.005	NT	NT	NT	<0.005			
03/19/97	Lead, dissolved	0.015	0.005	NT		NT	NT	NT	NT	NT	NT	NT	NT			
06/18/97	Lead, dissolved	0.015	0.005	<0.005		<0.005	NT	NT	NT	NT	NT	NT	<0.005			
08/30/97	Lead, dissolved	0.015	0.005	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/10/98	Lead, dissolved	0.015	0.005	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
09/21/98	Lead, dissolved	0.015	0.005	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/18/99	Lead, dissolved	0.015	0.005	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/21/99	Lead, dissolved	0.015	0.005	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/21/2000	Lead, dissolved	0.015	0.005	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
06/28/2000	Lead, dissolved	0.015	0.005	NT	<0.005	NT	NT	DRY	NT	NT	NT	NT	NT	<0.005	<0.005	<0.005
09/28/2000	Lead, dissolved	0.015	0.005	NT	NT	<0.005	NT	DRY	NT	NT	NT	NT	DRY	<0.005	<0.005	<0.005
12/27/2000	Lead, dissolved	0.015	0.005	NT	<0.005	NT	NT	Dry	NT	NT	NT	NT	NT	<0.005	<0.005	<0.005
03/28/2001	Lead, dissolved	0.015	0.005	NT	<0.005	<0.005	NT	NT	NT	NT	NT	NT	NT	<0.005	<0.005	<0.005
09/02/2001	Lead, dissolved	0.015	0.005	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/19/2002	Lead, dissolved	0.015	0.005	NT	NT	<0.005	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/19/2002	Lead, dissolved	0.015	0.005	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/14/2003	Lead, dissolved	0.015	0.005	NT	NT	NT	NT	DRY	NT	NT	NT	NT	NT	NT	NT	NT
09/29/2003	Lead, dissolved	0.015	0.005	NT	NT	NT	NT	DRY	NT	NT	NT	NT	NT	NT	NT	NT
03/08/2004	Lead, dissolved	0.015	0.005	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/27/2004	Lead, dissolved	0.015	0.005	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

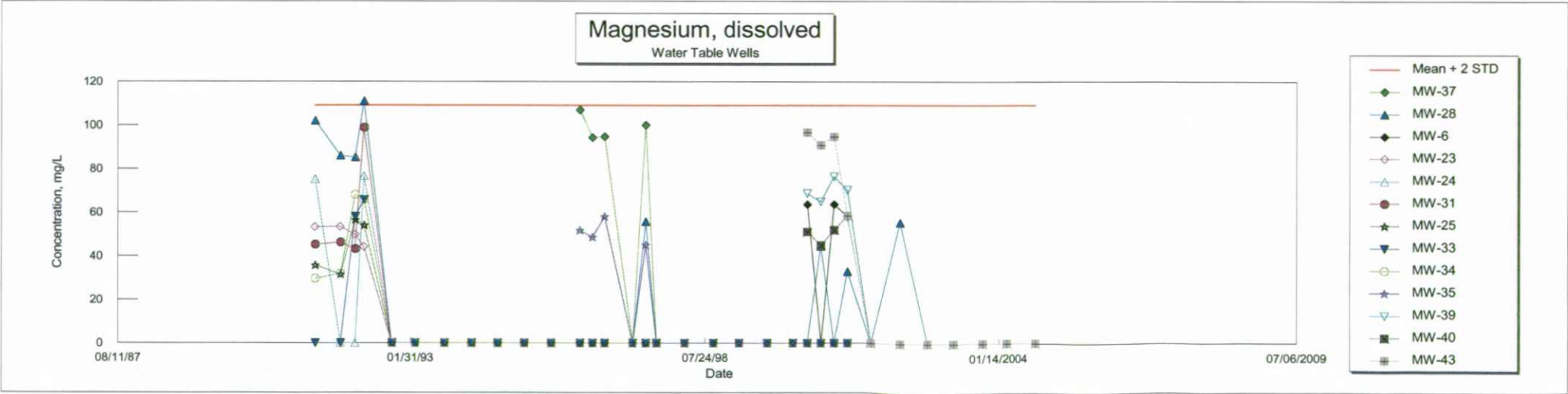
Mean	ERR	ERR	ERR	0.009	0.012	0.006	0.007	ERR	0.01	ERR	ERR	ERR	ERR
Standard Deviation (STD)	ERR	ERR	ERR	0	0	0	0	ERR	0	ERR	ERR	ERR	ERR
Mean + 2 STD	ERR	ERR	ERR	0.009	0.012	0.006	0.007	ERR	0.01	ERR	ERR	ERR	ERR



AMES-STORY ENVIRONMENTAL LANDFILL
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DATE	PARAMETER mg/L	ACTION LEVEL	MEAN + 2 STD WT	WATER TABLE WELLS												
				U.G.W MW-37	D.G.W MW 6	D.G.W MW 28	D.G.W MW 23	D.G.W MW 24	D.G.W MW 31	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.G.W MW 39	D.G.W MW 40	D.G.W MW 43
04/23/91	Magnesium, dissolved	--	109.2752			102	53.2	75.1	45.2	35.6	---	29.5				
10/15/91	Magnesium, dissolved	--	109.2752			85.9	53.4	---	46.1	31.4	---	31.7				
01/23/92	Magnesium, dissolved	--	109.2752			85.2	49.8	---	43.1	56.4	58	68				
03/23/92	Magnesium, dissolved	--	109.2752			111	44.1	76.6	98.9	53.9	65.7	65.7				
09/30/92	Magnesium, dissolved	--	109.2752			NT	NT	NT	NT	NT	NT	NT				
03/05/93	Magnesium, dissolved	--	109.2752			NT	NT	NT	NT	NT	NT	NT				
09/21/93	Magnesium, dissolved	--	109.2752			NT	NT	NT	NT	NT	NT	NT				
03/23/94	Magnesium, dissolved	--	109.2752			NT	NT	NT	NT	NT	NT	NT				
09/16/94	Magnesium, dissolved	--	109.2752			NT	NT	NT	NT	NT	NT	NT				
03/16/95	Magnesium, dissolved	--	109.2752			NT	NT	NT	NT	NT	NT	NT				
09/13/95	Magnesium, dissolved	--	109.2752			NT	NT	NT	NT	NT	NT	NT				
03/28/96	Magnesium, dissolved	--	109.2752	107		NT	NT	NT	NT	NT	NT	NT	51.8			
06/20/96	Magnesium, dissolved	--	109.2752	94.3		NT	NT	NT	NT	NT	NT	NT	48.6			
09/13/96	Magnesium, dissolved	--	109.2752	94.7		NT	NT	Dry	NT	NT	NT	NT	58.1			
03/19/97	Magnesium, dissolved	--	109.2752	NT		NT	NT	NT	NT	NT	NT	NT	NT			
06/18/97	Magnesium, dissolved	--	109.2752	100		55.7	NT	NT	NT	NT	NT	NT	45			
08/30/97	Magnesium, dissolved	--	109.2752	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/10/98	Magnesium, dissolved	--	109.2752	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
09/21/98	Magnesium, dissolved	--	109.2752	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/18/99	Magnesium, dissolved	--	109.2752	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
09/21/99	Magnesium, dissolved	--	109.2752	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/21/2000	Magnesium, dissolved	--	109.2752	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
06/28/2000	Magnesium, dissolved	--	109.2752	NT	63.7	NT	NT	DRY	NT	NT	NT	NT	NT	68.7	51.1	96.7
09/28/2000	Magnesium, dissolved	--	109.2752	NT	NT	44.6	NT	DRY	NT	NT	NT	NT	DRY	64.9	44.9	90.9
12/27/2000	Magnesium, dissolved	--	109.2752	NT	63.7	NT	NT	Dry	NT	NT	NT	NT	NT	76.4	51.9	94.7
03/28/2001	Magnesium, dissolved	--	109.2752	NT	58.1	32.9	NT	NT	NT	NT	NT	NT	NT	70.2	58.4	58.4
09/02/2001	Magnesium, dissolved	--	109.2752	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/19/2002	Magnesium, dissolved	--	109.2752	NT	NT	55.4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/19/2002	Magnesium, dissolved	--	109.2752	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/14/2003	Magnesium, dissolved	--	109.2752	NT	NT	NT	NT	DRY	NT	NT	NT	NT	NT	NT	NT	NT
09/29/2003	Magnesium, dissolved	--	109.2752	NT	NT	NT	NT	DRY	NT	NT	NT	NT	NT	NT	NT	NT
03/08/2004	Magnesium, dissolved	--	109.2752	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/27/2004	Magnesium, dissolved	--	109.2752	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

Mean	99	61.83333	71.5875	50.125	75.85	58.325	44.325	61.85	48.725	50.875	70.05	51.575	85.175
Standard Deviation (STD)	5.137606	2.639865	26.47619	3.761233	0.75	23.45127	10.96207	3.85	18.1599	4.815275	4.143972	4.781932	15.5983
Mean + 2 STD	109.2752	67.11306	124.5399	57.64747	77.35	105.2275	66.24913	69.55	85.04479	60.50555	78.33794	61.13886	116.3716



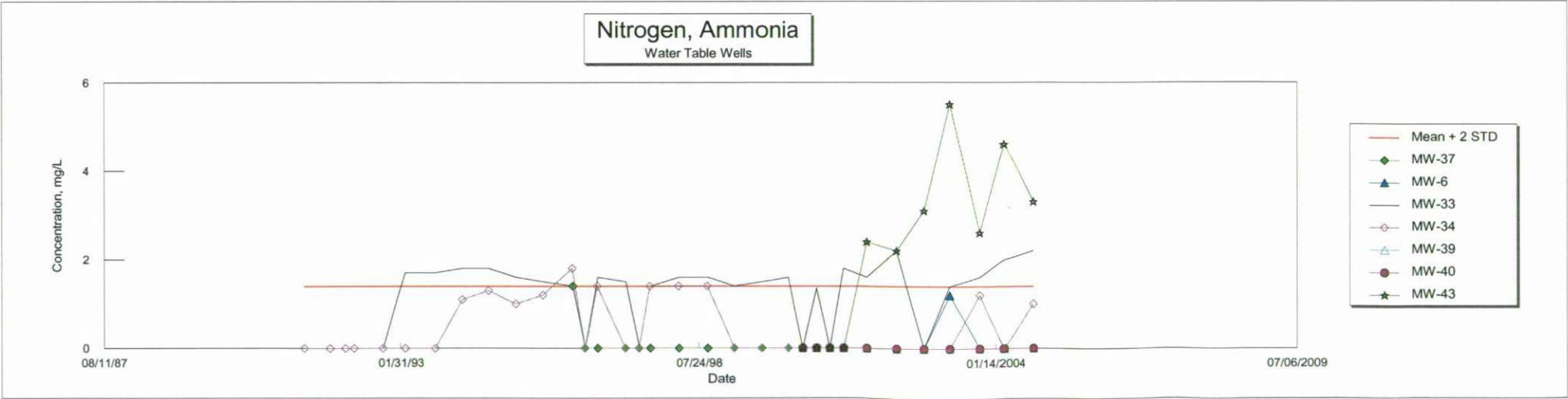
AMES-STORY ENVIRONMENTAL LANDFILL
85-SDP-13-91P
MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD WT	WATER TABLE WELLS												
				U.G.W MW-37	D.G.W MW 6	D.G.W MW 28	D.G.W MW 23	D.G.W MW 24	D.G.W MW 31	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.G.W MW 39	D.G.W MW 40	D.G.W MW 43
04/23/91	Mercury, dissolved	0.002	0.0005			<0.001	<0.001	<0.001	<0.001	<0.001	---	<0.001				
10/15/91	Mercury, dissolved	0.002	0.0005			<0.0005	<0.0005	---	<0.0005	<0.0005	---	<0.0005				
01/23/92	Mercury, dissolved	0.002	0.0005			<0.0005	<0.0005	---	<0.0005	<0.0005	<0.0005	<0.0005				
03/23/92	Mercury, dissolved	0.002	0.0005			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005				
09/30/92	Mercury, dissolved	0.002	0.0005			NT	NT	NT	NT	NT	NT	NT				
03/05/93	Mercury, dissolved	0.002	0.0005			NT	NT	NT	NT	NT	NT	NT				
09/21/93	Mercury, dissolved	0.002	0.0005			NT	NT	NT	NT	NT	NT	NT				
03/23/94	Mercury, dissolved	0.002	0.0005			NT	NT	NT	NT	NT	NT	NT				
09/16/94	Mercury, dissolved	0.002	0.0005			NT	NT	NT	NT	NT	NT	NT				
03/16/95	Mercury, dissolved	0.002	0.0005			NT	NT	NT	NT	NT	NT	NT				
09/13/95	Mercury, dissolved	0.002	0.0005			NT	NT	NT	NT	NT	NT	NT				
03/28/96	Mercury, dissolved	0.002	0.0005	<0.0005		NT	NT	NT	NT	NT	NT	NT	<0.0005			
06/20/96	Mercury, dissolved	0.002	0.0005	<0.0005		NT	NT	NT	NT	NT	NT	NT	<0.0005			
09/13/96	Mercury, dissolved	0.002	0.0005	<0.0005		NT	NT	Dry	NT	NT	NT	NT	<0.0005			
03/19/97	Mercury, dissolved	0.002	0.0005	NT		NT	NT	NT	NT	NT	NT	NT	NT			
06/18/97	Mercury, dissolved	0.002	0.0005	<0.0005		<0.0005	NT	NT	NT	NT	NT	NT	<0.0005			
08/30/97	Mercury, dissolved	0.002	0.0005	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/10/98	Mercury, dissolved	0.002	0.0005	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
09/21/98	Mercury, dissolved	0.002	0.0005	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/18/99	Mercury, dissolved	0.002	0.0005	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
09/21/99	Mercury, dissolved	0.002	0.0005	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/28/2000	Mercury, dissolved	0.002	0.0005	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
06/28/2000	Mercury, dissolved	0.002	0.0005	NT	<0.0005	NT	NT	DRY	NT	NT	NT	NT	NT	<0.0005	<0.0005	<0.0005
09/28/2000	Mercury, dissolved	0.002	0.0005	NT	NT	<0.0005	NT	DRY	NT	NT	NT	NT	DRY	<0.0005	<0.0005	<0.0005
12/27/2000	Mercury, dissolved	0.002	0.0005	NT	<0.0005	NT	NT	Dry	NT	NT	NT	NT	NT	<0.0005	<0.0005	<0.0005
03/28/2001	Mercury, dissolved	0.002	0.0005	NT	<0.0005	<0.0005	NT	NT	NT	NT	NT	NT	NT	<0.0005	<0.0005	<0.0005
09/02/2001	Mercury, dissolved	0.002	0.0005	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/19/2002	Mercury, dissolved	0.002	0.0005	NT	NT	<0.0005	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/19/2002	Mercury, dissolved	0.002	0.0005	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/14/2003	Mercury, dissolved	0.002	0.0005	NT	NT	NT	NT	DRY	NT	NT	NT	NT	NT	NT	NT	NT
09/29/2003	Mercury, dissolved	0.002	0.0005	NT	NT	NT	NT	DRY	NT	NT	NT	NT	NT	NT	NT	NT
03/08/2004	Mercury, dissolved	0.002	0.0005	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/27/2004	Mercury, dissolved	0.002	0.0005	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Mean			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Standard Deviation (STD)			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Mean + 2 STD			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

AMES-STORY ENVIRONMENTAL LANDFILL
85-SDP-13-91P
MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER mg/L	ACTION LEVEL	MEAN + 2 STD WT	WATER TABLE WELLS												
				U.G.W MW-37	D.G.W MW 6	D.G.W MW 28	D.G.W MW 23	D.G.W MW 24	D.G.W MW 31	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.G.W MW 39	D.G.W MW 40	D.G.W MW 43
04/23/91	Nitrogen, Ammonia	--	1.4			<0.5	<0.5	<0.5	<0.5	<0.5	---	<0.5				
10/15/91	Nitrogen, Ammonia	--	1.4			<0.5	<0.5	---	<0.5	<0.5	---	<0.5				
01/23/92	Nitrogen, Ammonia	--	1.4			<1.0	<1.0	---	<1.0	<1.0	<1.0	<1.0				
03/23/92	Nitrogen, Ammonia	--	1.4			<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				
09/30/92	Nitrogen, Ammonia	--	1.4			---	<1	<1	<1	<1	<1	<1				
03/05/93	Nitrogen, Ammonia	--	1.4			<1	<1	---	<1	<1	1.7	<1				
09/21/93	Nitrogen, Ammonia	--	1.4			<1	<1	<1	<1	<1	1.7	<1				
03/23/94	Nitrogen, Ammonia	--	1.4			<1	<1	<1	<1	<1	1.8	1.1				
09/16/94	Nitrogen, Ammonia	--	1.4			<1	<1	NT	<1	<1	1.8	1.3				
03/16/95	Nitrogen, Ammonia	--	1.4			<1	<1	NT	<1	<1	1.6	1				
09/13/95	Nitrogen, Ammonia	--	1.4			<1	<1	NT	<1	<1	1.5	1.2				
03/28/96	Nitrogen, Ammonia	--	1.4	1.4		<1	<1	NT	<1	<1	1.4	1.8	<1			
06/20/96	Nitrogen, Ammonia	--	1.4	<1		NT	NT	NT	NT	NT	NT	NT	<1			
09/13/96	Nitrogen, Ammonia	--	1.4	<1		<1	<1	Dry	<1	<1	1.6	1.4	<1			
03/19/97	Nitrogen, Ammonia	--	1.4	<1		<1	<1	<1	<1	<1	1.5	<1	<1			
06/18/97	Nitrogen, Ammonia	--	1.4	<1		<1	NT	NT	NT	NT	NT	NT	<1			
08/30/97	Nitrogen, Ammonia	--	1.4	<1		<1	<1	DRY	<1	<1	1.4	1.4	<1			
03/10/98	Nitrogen, Ammonia	--	1.4	<1		<1	<1	DRY	<1	<1	1.6	1.4	<1			
09/21/98	Nitrogen, Ammonia	--	1.4	<1		<1	<1	DRY	<1	<1	1.6	1.4	<1			
03/18/99	Nitrogen, Ammonia	--	1.4	<1		<1	<1	DRY	<1	<1	1.4	<1	<1			
09/21/99	Nitrogen, Ammonia	--	1.4	<1		<1	<1	DRY	<1	<1	1.5	<1	<1			
03/21/2000	Nitrogen, Ammonia	--	1.4	NT		<1	<1	DRY	<1	<1	1.6	<1	NT			
06/28/2000	Nitrogen, Ammonia	--	1.4	NT	<1	NT	NT	DRY	NT	NT	NT	NT	NT	<1	<1	<1
09/28/2000	Nitrogen, Ammonia	--	1.4	<1	<1	<1	<1	DRY	<1	<1	1.35	<1	DRY	<1	<1	<1
12/27/2000	Nitrogen, Ammonia	--	1.4	NT	<1	NT	NT	Dry	NT	NT	NT	NT	NT	<1	<1	<1
03/28/2001	Nitrogen, Ammonia	--	1.4	<1	<1	<1	<1	<1	<1	<1	1.8	<1	<1	<1	<1	<1
09/02/2001	Nitrogen, Ammonia	--	1.4	<1	<1	<1	<1	NT	<1	<1	1.6	<1	<1	<1	<1	2.4
03/19/2002	Nitrogen, Ammonia	--	1.4	<1	<1	<1	<1	Dry	<1	<1	2.2	<1	<1	<1	<1	2.2
09/19/2002	Nitrogen, Ammonia	--	1.4	<1	<1	<1	<1	Dry	<1	<1	<1	<1	<1	<1	<1	3.1
03/14/2003	Nitrogen, Ammonia	--	1.4	<1	1.2	<1	<1	Dry	<1	<1	1.4	<1	<1	<1	<1	5.5
09/29/2003	Nitrogen, Ammonia	--	1.4	<1.0	<1.0	<1.0	<1.0	Dry	<1.0	<1.0	1.6	1.2	<1.0	<1	<1.0	2.6
03/08/2004	Nitrogen, Ammonia	--	1.4	<1.0	<1.0	<1	<1.0	<1.0	<1.0	<1.0	2	<1.0	<1.0	<1	<1.0	4.6
09/27/2004	Nitrogen, Ammonia	--	1.4	<1.0	<1.0	<1	<1.0	<1.0	<1.0	<1.0	2.2	1	<1.0	<1.0	<1.0	3.3

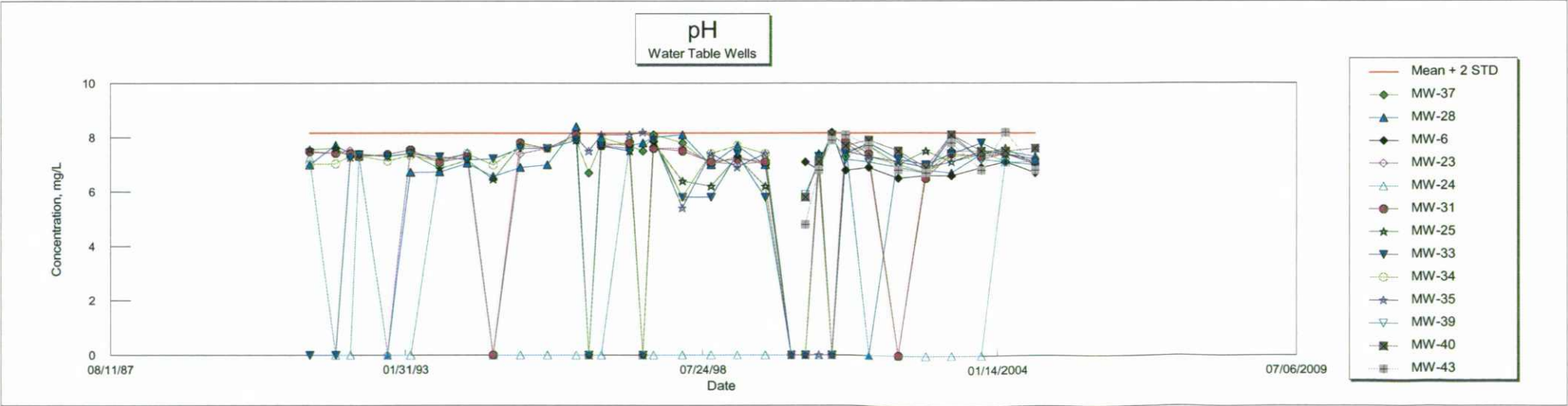
Mean	1.4	1.2	ERR	ERR	ERR	ERR	ERR	ERR	1.645652	1.290909	ERR	ERR	ERR	3.385714
Standard Deviation (STD)	0	0	ERR	ERR	ERR	ERR	ERR	ERR	0.230742	0.219315	ERR	ERR	ERR	1.135692
Mean + 2 STD	1.4	1.2	ERR	ERR	ERR	ERR	ERR	ERR	2.107137	1.72954	ERR	ERR	ERR	5.657098



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85-SDP-13-91P
MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD WT	WATER TABLE WELLS													
				U.G.W MW-37	D.G.W MW 6	D.G.W MW 28	D.G.W MW 23	D.G.W MW 24	D.G.W MW 31	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.G.W MW 39	D.G.W MW 40	D.G.W MW 43	
04/23/91	pH	--	8.166256			6.99	7.45	7.25	7.48	7.55	---	7.01					
10/15/91	pH	--	8.166256			7.71	7.42	---	7.42	7.60	---	7.03					
01/23/92	pH	--	8.166256			7.41	7.52	---	7.41	7.27	7.26	7.31					
03/23/92	pH	--	8.166256			7.32	7.33	7.30	7.30	7.39	7.37	7.32					
09/30/92	pH	--	8.166256			---	7.28	---	7.37	7.31	7.3	7.13					
03/05/93	pH	--	8.166256			6.72	7.43	---	7.54	7.41	7.42	7.34					
09/21/93	pH	--	8.166256			6.73	7.19	7.09	7.08	6.85	7.29	7.12					
03/23/94	pH	--	8.166256			7.05	7.4	7.45	7.29	7.16	7.18	7.4					
09/16/94	pH	--	8.166256			6.57				6.46	7.22	6.99					
03/16/95	pH	--	8.166256			6.9	7.4	DRY	7.8	7.7	7.6	7.7					
09/13/95	pH	--	8.166256			7	7.6	DRY	7.6	7.6	7.6	7.6					
03/28/96	pH	--	8.166256	7.9		8.4	8.1	DRY	8.1	7.9	7.9	8	8				
06/20/96	pH	--	8.166256	6.7		NT	NT	NT	NT	NT	NT	NT	7.5				
09/13/96	pH	--	8.166256	7.8		8	7.7	Dry	7.7	7.7	7.7	8	8.1				
03/19/97	pH	--	8.166256	7.7		7.7	7.6	7.7	7.8	7.5	7.5	7.7	8.1				
06/18/97	pH	--	8.166256	7.5		7.8	NT	NT	NT	NT	NT	NT	8.2				
08/30/97	pH	--	8.166256	8.1		8	7.6	DRY	7.6	7.8	7.9	8	8				
03/10/98	pH	--	8.166256	7.8		8.1	7.6	DRY	7.5	6.4	5.8	5.8	5.4				
09/21/98	pH	--	8.166256	7		7	7.1	DRY	7.1	6.2	5.8	7.4	7.4				
03/18/99	pH	--	8.166256	7.3		7.7	7	DRY	7.2	7.3	7.4	7.7	6.9				
09/21/99	pH	--	8.166256	7		7	7.1	DRY	7.1	6.2	5.8	7.4	7.4				
03/21/2000	pH	--	8.166256	NT		NT	NT	DRY	NT	NT	NT	NT	NT				
06/28/2000	pH	--	8.166256	NT	7.1	NT	NT	DRY	NT	NT	NT	NT	NT	5.9	5.8	4.8	
09/28/2000	pH	--	8.166256	7	6.8	7.4	7	DRY	6.9	7.2	7.3	7.2	NT	7.1	7.1	6.8	
12/27/2000	pH	--	8.166256	NT	8.2	NT	NT	Dry	NT	NT	NT	NT	NT	8	8.1	7.9	
03/28/2001	pH	--	8.166256	7.3	6.8	7.8	7.8	7.7	7.9	7.5	7.4	7.5	7.5	7.2	7.7	8.1	
09/02/2001	pH	--	8.166256	7.7	6.9	NT	7.2	NT	7.4	7.7	7.8	7.3	7.3	7.1	7.9	7.7	
03/19/2002	pH	--	8.166256	6.8	6.5	7.4	NT	Dry	NT	7	7.2	7	7.1	6.9	7.5	6.8	
09/19/2002	pH	--	8.166256	6.7	6.6	6.8	6.7	Dry	6.5	7.5	7	6.7	6.9	6.7	6.9	6.7	
03/14/2003	pH	--	8.166256	7.5	6.6	6.7	8.1	Dry	7.4	7.1	7.4	7.3	7.1	8	8.1	7.8	
09/29/2003	pH	--	8.166256	7.5	6.9	7.4	7.2	Dry	7.3	7.4	7.8	7.4	7.5	7.2	7.5	6.8	
03/08/2004	pH	--	8.166256	7.1	7.1	7.5	7.4	7.1	7.4	7.6	7.4	7.4	7.4	7.1	7.5	8.2	
09/27/2004	pH	--	8.166256	7.1	6.7	7.3	7.1	7.1	7	7	7.1	7.2	7.2	7	7.6	6.8	

Mean	7.342105	6.927273	7.348148	7.4016	7.33625	7.391923	7.260714	7.247692	7.319643	7.388889	7.109091	7.427273	7.127273
Standard Deviation (STD)	0.412075	0.443316	0.480386	0.323551	0.239423	0.330513	0.459743	0.571794	0.429106	0.62795	0.546816	0.623904	0.929409
Mean + 2 STD	8.166256	7.813904	8.30892	8.048703	7.815096	8.052948	8.180201	8.391281	8.177855	8.644789	8.202724	8.675081	8.986091



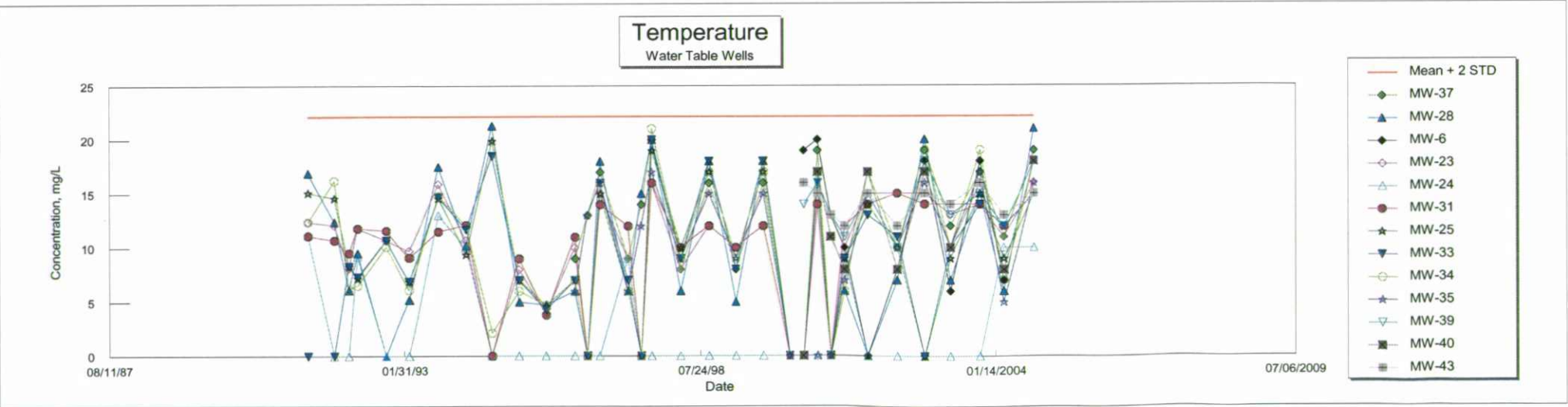
AMES-STORY ENVIRONMENTAL LANDFILL
85-SDP-13-91P
MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER mg/L	ACTION LEVEL	MEAN + 2 STD WT	WATER TABLE WELLS												
				U.G.W MW-37	D.G.W MW 6	D.G.W MW 28	D.G.W MW 23	D.G.W MW 24	D.G.W MW 31	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.G.W MW 39	D.G.W MW 40	D.G.W MW 43
04/23/91	Phenols	--	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	---	<0.1				
10/15/91	Phenols	--	0.1			<0.1	<0.1	---	<0.1	<0.1	---	<0.1				
01/23/92	Phenols	--	0.1			<0.1	<0.1	---	<0.1	<0.1	<0.1	<0.1				
03/23/92	Phenols	--	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
09/30/92	Phenols	--	0.1			---	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
03/05/93	Phenols	--	0.1			NT	NT	NT	NT	NT	NT	NT				
09/21/93	Phenols	--	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
03/23/94	Phenols	--	0.1			NT	NT	NT	NT	NT	NT	NT				
09/16/94	Phenols	--	0.1			<0.1	<0.1	NT	<0.1	<0.1	<0.1	<0.1				
03/16/95	Phenols	--	0.1			<0.1	<0.1	NT	<0.1	<0.1	<0.1	<0.1				
09/13/95	Phenols	--	0.1			NT	NT	NT	NT	NT	NT	NT				
03/28/96	Phenols	--	0.1	NT		NT	NT	NT	NT	NT	NT	NT	NT			
06/20/96	Phenols	--	0.1	NT		NT	NT	NT	NT	NT	NT	NT	NT			
09/13/96	Phenols	--	0.1	<0.1		<0.1	<0.1	Dry	<0.1	<0.1	<0.1	<0.1	<0.1			
03/19/97	Phenols	--	0.1	NT		NT	NT	NT	NT	NT	NT	NT	NT			
06/18/97	Phenols	--	0.1	NT		NT	NT	NT	NT	NT	NT	NT	NT			
08/30/97	Phenols	--	0.1	<0.1		<0.1	<0.1	DRY	<0.1	<0.1	<0.1	<0.1	<0.1			
03/10/98	Phenols	--	0.1	NT		NT	NT	NT	NT	NT	NT	NT	NT			
09/21/98	Phenols	--	0.1	<0.1		<0.1	<0.1	DRY	<0.1	<0.1	<0.1	<0.1	<0.1			
03/18/99	Phenols	--	0.1	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
09/21/99	Phenols	--	0.1	<0.1		<0.1	<0.1	DRY	<0.1	<0.1	<0.1	<0.1	<0.1			
03/21/2000	Phenols	--	0.1	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
06/28/2000	Phenols	--	0.1	NT	NT	NT	NT	DRY	NT	NT	NT	NT	NT	NT	NT	NT
09/28/2000	Phenols	--	0.1	<0.1	<0.1	<0.1	<0.1	DRY	<0.1	<0.1	<0.1	<0.1	DRY	<0.1	<0.1	<0.1
12/27/2000	Phenols	--	0.1	NT	NT	NT	NT	Dry	NT	NT	NT	NT	NT	NT	NT	NT
03/28/2001	Phenols	--	0.1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/02/2001	Phenols	--	0.1	<0.1	<0.1	<0.1	<0.1	NT	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
03/19/2002	Phenols	--	0.1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/19/2002	Phenols	--	0.1	<0.1	<0.1	<0.1	<0.1	Dry	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
03/14/2003	Phenols	--	0.1	NT	NT	NT	NT	Dry	NT	NT	NT	NT	NT	NT	NT	NT
09/29/2003	Phenols	--	0.1	<0.100	<0.100	<0.100	<0.100	Dry	<0.100	<0.100	<0.100	<0.100	<0.100	NT	<0.100	<0.100
03/08/2004	Phenols	--	0.1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/27/2004	Phenols	--	0.1	<0.100	<0.100	<0.100	<0.100	NT	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Mean				ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
Standard Deviation (STD)				ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
Mean + 2 STD				ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

AMES-STORY ENVIRONMENTAL LANDFILL
85-SDP-13-91P
MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD WT	WATER TABLE WELLS												
				U.G.W MW-37	D.G.W MW 6	D.G.W MW 28	D.G.W MW 23	D.G.W MW 24	D.G.W MW 31	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.G.W MW 39	D.G.W MW 40	D.G.W MW 43
04/23/91	Temperature, celsius	--	22.16435			16.9	12.4	11.2	11.1	15.1	---	12.4				
10/15/91	Temperature, celsius	--	22.16435			12.4	12.1	---	10.7	14.6	---	16.2				
01/23/92	Temperature, celsius	--	22.16435			6.1	8.1	---	9.5	8.3	8.3	6.2				
03/23/92	Temperature, celsius	--	22.16435			9.5	11.8	9.2	11.8	7.2	7.3	6.5				
09/30/92	Temperature, celsius	--	22.16435			---	10.7	---	11.6	10.7	10.7	10.1				
03/05/93	Temperature, celsius	--	22.16435			5.2	9.7	---	9.1	6.9	6.9	6.1				
09/21/93	Temperature, celsius	--	22.16435			17.5	15.9	13	11.5	14.6	14.7	14.8				
03/23/94	Temperature, celsius	--	22.16435			10.2	10.7	10	12.1	9.4	11.7	12				
09/16/94	Temperature, celsius	--	22.16435			21.3				19.9	18.5	2.11				
03/16/95	Temperature, celsius	--	22.16435			5	8	DRY	9	7	7	6				
09/13/95	Temperature, celsius	--	22.16435			4.72	3.89	DRY	3.8	4.63	4.24	4.66				
03/28/96	Temperature, celsius	--	22.16435	9		6	10	DRY	11	7	7		6			
06/20/96	Temperature, celsius	--	22.16435	13		NT	NT	NT	NT	NT	NT	NT	13			
09/13/96	Temperature, celsius	--	22.16435	17		18	15	Dry	14	15	16	16	16			
03/19/97	Temperature, celsius	--	22.16435	9		6	9	9	12	6	7	6	6			
06/18/97	Temperature, celsius	--	22.16435	14		15	NT	NT	NT	NT	NT	NT	12			
08/30/97	Temperature, celsius	--	22.16435	20		20	16	DRY	16	19	20	21	17			
03/10/98	Temperature, celsius	--	22.16435	8		6	8	DRY	10	10	9	9	9			
09/21/98	Temperature, celsius	--	22.16435	16		18	12	DRY	12	17	18	17	15			
03/18/99	Temperature, celsius	--	22.16435	8		5	10	DRY	10	9	8	9	9			
09/21/99	Temperature, celsius	--	22.16435	16		18	12	DRY	12	17	18	17	15			
03/21/2000	Temperature, celsius	--	22.16435	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
06/28/2000	Temperature, celsius	--	22.16435	NT	19	NT	NT	DRY	NT	NT	NT	NT	NT	14	NT	16
09/28/2000	Temperature, celsius	--	22.16435	19	20	17	14	DRY	14	17	16	17	NT	16	17	15
12/27/2000	Temperature, celsius	--	22.16435	NT	13	NT	NT	Dry	NT	NT	NT	NT	NT	13	11	13
03/28/2001	Temperature, celsius	--	22.16435	8	10	6	10	9	12	9	9	6	7	11	8	12
09/02/2001	Temperature, celsius	--	22.16435	17	NT	NT	15	NT	14	14	13	17	15	15	17	15
03/19/2002	Temperature, celsius	--	22.16435	10	8	7	15	Dry	15	10	11	10	10	10	8	12
09/19/2002	Temperature, celsius	--	22.16435	19	18	20	15	Dry	14	NT	NT	19	16	18	17	15
03/14/2003	Temperature, celsius	--	22.16435	12	6	7	13	Dry	14	9	10	10	10	13	10	14
09/29/2003	Temperature, celsius	--	22.16435	17	18	15	14	Dry	14	15	14	19	17	15	16	16
03/08/2004	Temperature, celsius	--	22.16435	11	7	6	11	10	12	9	12	7	5	12	8	13
09/27/2004	Temperature, celsius	--	22.16435	19	18	21	16	10	15	15	15	18	16	18	18	15

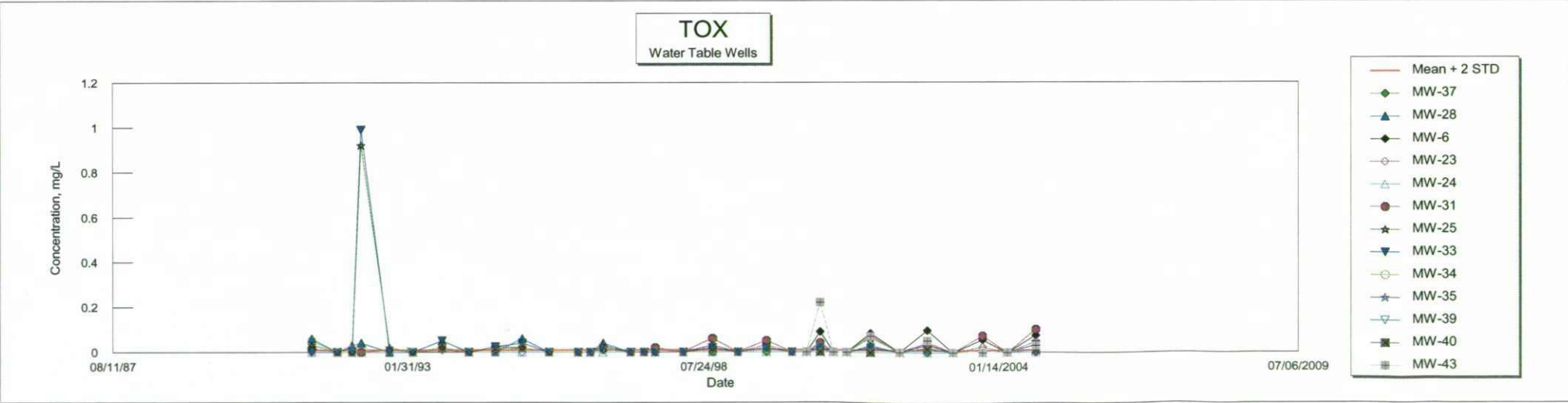
Mean	13.78947	13.7	11.84519	11.78852	10.175	11.8963	11.71593	11.6936	11.5025	11.88889	14.09091	13	14.18182
Standard Deviation (STD)	4.187437	5.235456	5.999387	2.949354	1.266639	2.438652	4.276846	4.321947	5.304	4.067334	2.502891	4.123106	1.402477
Mean + 2 STD	22.16435	24.17091	23.84396	17.68723	12.70828	16.7736	20.26962	20.33749	22.1105	20.02356	19.09669	21.24621	16.98677



AMES-STORY ENVIRONMENTAL LANDFILL
85-SDP-13-91P
MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD WT	WATER TABLE WELLS												
				U.G.W MW-37	D.G.W MW 6	D.G.W MW 28	D.G.W MW 23	D.G.W MW 24	D.G.W MW 31	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.G.W MW 39	D.G.W MW 40	D.G.W MW 43
	mg/L															
04/23/91	Total Organic Halogens	--	0.01			0.06	<0.01	<0.01	0.016	0.033	---	0.05				
10/15/91	Total Organic Halogens	--	0.01			<0.01	<0.01	---	<0.01	<0.01	---	<0.01				
01/23/92	Total Organic Halogens	--	0.01			0.03	0.02	---	<0.01	<0.01	<0.01	<0.01				
03/23/92	Total Organic Halogens	--	0.01			0.04	<0.01	<0.01	<0.01	0.92	0.99	0.01				
09/30/92	Total Organic Halogens	--	0.01			---	<0.01	0.01	0.01	0.02	<0.01	0.01				
03/05/93	Total Organic Halogens	--	0.01			NT	NT	NT	NT	NT	NT	NT				
09/21/93	Total Organic Halogens	--	0.01			0.05	0.01	0.02	0.02	0.02	0.05	0.02				
03/23/94	Total Organic Halogens	--	0.01			NT	NT	NT	NT	NT	NT	NT				
09/16/94	Total Organic Halogens	--	0.01			<0.05	<0.01	NT	0.015	0.024	0.024	<0.01				
03/16/95	Total Organic Halogens	--	0.01			0.06	<0.01	NT	0.02	0.02	0.04	0.02				
09/13/95	Total Organic Halogens	--	0.01			NT	NT	NT	NT	NT	NT	NT				
03/28/96	Total Organic Halogens	--	0.01	NT		NT	NT	NT	NT	NT	NT	NT	NT			
06/20/96	Total Organic Halogens	--	0.01	NT		NT	NT	NT	NT	NT	NT	NT	NT			
09/13/96	Total Organic Halogens	--	0.01	0.01		0.04	0.01	Dry	0.02	0.02	0.01	0.01	0.03			
03/19/97	Total Organic Halogens	--	0.01	NT		NT	NT	NT	NT	NT	NT	NT	NT			
06/18/97	Total Organic Halogens	--	0.01	NT		NT	NT	NT	NT	NT	NT	NT	NT			
08/30/97	Total Organic Halogens	--	0.01	<0.01		0.02	0.01	DRY	0.02	<0.01	<0.01	<0.01	<0.01			
03/10/98	Total Organic Halogens	--	0.01	NT		NT	NT	NT	NT	NT	NT	NT	NT			
09/21/98	Total Organic Halogens	--	0.01	<0.01		0.03	0.01	DRY	0.06	0.02	0.02	<0.01	0.03			
03/18/99	Total Organic Halogens	--	0.01	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
09/21/99	Total Organic Halogens	--	0.01	<0.01		0.03	0.03	DRY	0.05	0.02	0.02	0.01	0.02			
03/21/2000	Total Organic Halogens	--	0.01	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
06/28/2000	Total Organic Halogens	--	0.01	NT	NT	NT	NT	DRY	NT	NT	NT	NT	NT	NT	NT	NT
09/28/2000	Total Organic Halogens	--	0.01	<0.01	0.09	0.03	0.01	DRY	0.04	0.02	0.02	0.02	DRY	0.02	<0.01	0.22
12/27/2000	Total Organic Halogens	--	0.01	NT	NT	NT	NT	Dry	NT	NT	NT	NT	NT	NT	NT	NT
03/28/2001	Total Organic Halogens	--	0.01	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/02/2001	Total Organic Halogens	--	0.01	<0.01	0.085	0.022	0.03	NT	0.074	0.065	0.021	0.03	0.028	0.017	<0.01	0.072
03/19/2002	Total Organic Halogens	--	0.01	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/19/2002	Total Organic Halogens	--	0.01	<0.01	0.099	0.033	0.04	Dry	0.043	0.019	0.02	0.021	0.034	<0.01	0.015	0.052
03/14/2003	Total Organic Halogens	--	0.01	NT	NT	NT	NT	Dry	NT	NT	NT	NT	NT	NT	NT	NT
09/29/2003	Total Organic Halogens	--	0.01	<0.010	0.057	<0.010	0.025	Dry	0.075	<0.010	<0.010	0.012	<0.010	NT	<0.010	<0.010
03/08/2004	Total Organic Halogens	--	0.01	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/27/2004	Total Organic Halogens	--	0.01	<0.010	0.074	0.03	0.047	NT	0.101	0.034	0.034	0.012	0.029	<0.010	0.01	0.03

Mean	0.01	0.081	0.036538	0.022	0.015	0.040286	0.095	0.113545	0.01875	0.0285	0.0185	0.0125	0.0935
Standard Deviation (STD)	0	0.014464	0.012457	0.012828	0.005	0.027138	0.23847	0.277367	0.011218	0.004233	0.0015	0.0025	0.07453
Mean + 2 STD	0.01	0.109927	0.061452	0.047655	0.025	0.094562	0.57194	0.668279	0.041187	0.036966	0.0215	0.0175	0.24256



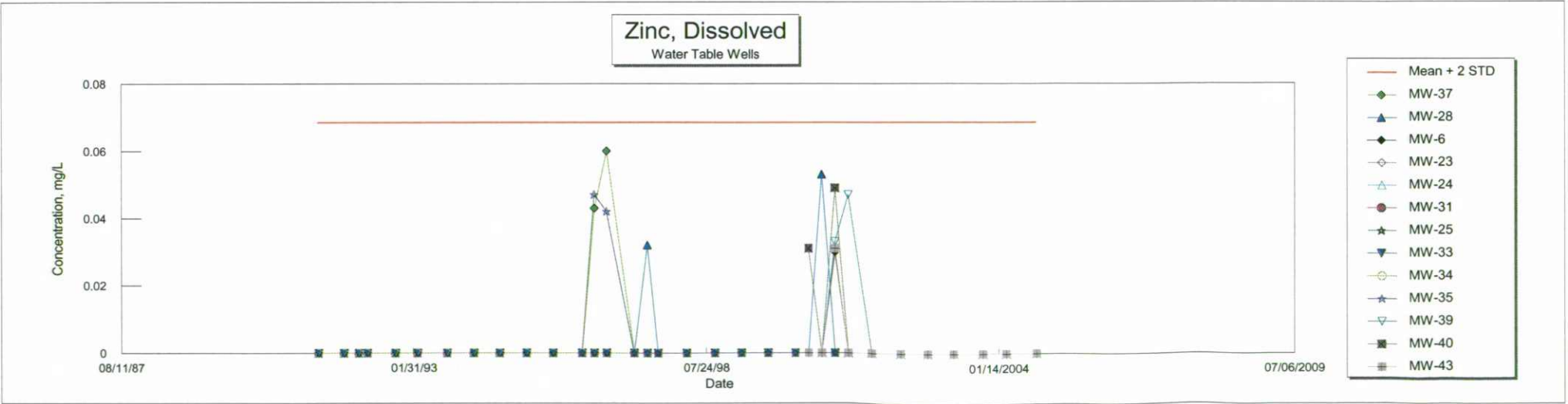
AMES-STORY ENVIRONMENTAL LANDFILL
85-SDP-13-91P
MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD WT	WATER TABLE WELLS												
				U.G.W MW-37	D.G.W MW 6	D.G.W MW 28	D.G.W MW 23	D.G.W MW 24	D.G.W MW 31	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.G.W MW 39	D.G.W MW 40	D.G.W MW 43
	ug/L															
04/23/91	Trichloroethene *	5	1			<1	<1	<1	<1	<1	---	<1				
10/15/91	Trichloroethene *	5	1			<1	<1	---	<1	<1	---	<1				
01/23/92	Trichloroethene *	5	1			<1	<1	---	<1	<1	<1	<1				
03/23/92	Trichloroethene *	5	1			<1	<1	<1	<1	<1	<1	<1				
09/30/92	Trichloroethene *	5	1			NT	NT	NT	NT	NT	NT	NT				
03/05/93	Trichloroethene *	5	1			NT	NT	NT	NT	NT	NT	NT				
09/21/93	Trichloroethene *	5	1			NT	NT	NT	NT	NT	NT	NT				
03/23/94	Trichloroethene *	5	1			NT	NT	NT	NT	NT	NT	NT				
09/16/94	Trichloroethene *	5	1			NT	NT	NT	NT	NT	NT	NT				
03/16/95	Trichloroethene *	5	1			NT	NT	NT	NT	NT	NT	NT				
09/13/95	Trichloroethene *	5	1			NT	NT	NT	NT	NT	NT	NT				
03/28/96	Trichloroethene *	5	1	<1		NT	NT	NT	NT	NT	NT	NT	<1			
06/20/96	Trichloroethene *	5	1	<1		NT	NT	NT	NT	NT	NT	NT	<1			
09/13/96	Trichloroethene *	5	1	<1		NT	NT	Dry	NT	NT	NT	NT	<1			
03/19/97	Trichloroethene *	5	1	NT		NT	NT	NT	NT	NT	NT	NT	NT			
06/18/97	Trichloroethene *	5	1	<1		<1	NT	NT	NT	NT	NT	NT	<1			
08/30/97	Trichloroethene *	5	1	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/10/98	Trichloroethene *	5	1	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
09/21/98	Trichloroethene *	5	1	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/18/99	Trichloroethene *	5	1	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
09/21/99	Trichloroethene *	5	1	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/21/2000	Trichloroethene *	5	1	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
06/28/2000	Trichloroethene *	5	1	NT	<1	NT	NT	DRY	NT	NT	NT	NT	NT	<1	<1	<1
09/28/2000	Trichloroethene *	5	1	NT	NT	<1	NT	DRY	NT	NT	NT	NT	DRY	<1	<1	<1
12/27/2000	Trichloroethene *	5	1	NT	<1	NT	NT	Dry	NT	NT	NT	NT	NT	<1	<1	<1
03/28/2001	Trichloroethene *	5	1	NT	<1	<1	NT	NT	NT	NT	NT	NT	NT	<1	<1	<1
09/02/2001	Trichloroethene *	5	1	NT	NT	<1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/19/2002	Trichloroethene *	5	1	NT	NT	<1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/19/2002	Trichloroethene *	5	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/14/2003	Trichloroethene *	5	1	NT	NT	NT	NT	DRY	NT	NT	NT	NT	NT	NT	NT	NT
09/29/2003	Trichloroethene *	5	1	NT	NT	NT	NT	DRY	NT	NT	NT	NT	NT	NT	NT	NT
03/08/2004	Trichloroethene *	5	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/27/2004	Trichloroethene *	5	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Mean			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Standard Deviation (STD)			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Mean + 2 STD			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

AMES-STORY ENVIRONMENTAL LANDFILL
85-SDP-13-91P
MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER mg/L	ACTION LEVEL	MEAN + 2 STD WT	WATER TABLE WELLS												
				U.G.W MW-37	D.G.W MW 6	D.G.W MW 28	D.G.W MW 23	D.G.W MW 24	D.G.W MW 31	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.G.W MW 39	D.G.W MW 40	D.G.W MW 43
04/23/91	Zinc, dissolved	2	0.0685			<0.03	<0.03	<0.03	<0.03	<0.03	---	<0.03				
10/15/91	Zinc, dissolved	2	0.0685			<0.03	<0.03	---	<0.03	<0.03	---	<0.03				
01/23/92	Zinc, dissolved	2	0.0685			<0.03	<0.03	---	<0.03	<0.03	<0.03	<0.03				
03/23/92	Zinc, dissolved	2	0.0685			<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03				
09/30/92	Zinc, dissolved	2	0.0685			NT	NT	NT	NT	NT	NT	NT				
03/05/93	Zinc, dissolved	2	0.0685			NT	NT	NT	NT	NT	NT	NT				
09/21/93	Zinc, dissolved	2	0.0685			NT	NT	NT	NT	NT	NT	NT				
03/23/94	Zinc, dissolved	2	0.0685			NT	NT	NT	NT	NT	NT	NT				
09/16/94	Zinc, dissolved	2	0.0685			NT	NT	NT	NT	NT	NT	NT				
03/16/95	Zinc, dissolved	2	0.0685			NT	NT	NT	NT	NT	NT	NT				
09/13/95	Zinc, dissolved	2	0.0685			NT	NT	NT	NT	NT	NT	NT				
03/28/96	Zinc, dissolved	2	0.0685	<0.03		NT	NT	NT	NT	NT	NT	NT	<0.03			
06/20/96	Zinc, dissolved	2	0.0685	0.043		NT	NT	NT	NT	NT	NT	NT	0.047			
09/13/96	Zinc, dissolved	2	0.0685	0.06		NT	NT	Dry	NT	NT	NT	NT	0.042			
03/19/97	Zinc, dissolved	2	0.0685	NT		NT	NT	NT	NT	NT	NT	NT	NT			
06/18/97	Zinc, dissolved	2	0.0685	<0.03		0.032	NT	NT	NT	NT	NT	NT	<0.03			
08/30/97	Zinc, dissolved	2	0.0685	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/10/98	Zinc, dissolved	2	0.0685	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
09/21/98	Zinc, dissolved	2	0.0685	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/18/99	Zinc, dissolved	2	0.0685	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
09/21/99	Zinc, dissolved	2	0.0685	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
03/21/2000	Zinc, dissolved	2	0.0685	NT		NT	NT	DRY	NT	NT	NT	NT	NT			
06/28/2000	Zinc, dissolved	2	0.0685	NT	<0.03	NT	NT	DRY	NT	NT	NT	NT	NT	<0.03	0.031	<0.03
09/28/2000	Zinc, dissolved	2	0.0685	NT	NT	0.053	NT	DRY	NT	NT	NT	NT	DRY	<0.03	<0.03	<0.03
12/27/2000	Zinc, dissolved	2	0.0685	NT	0.03	NT	NT	Dry	NT	NT	NT	NT	NT	0.033	0.049	0.031
03/28/2001	Zinc, dissolved	2	0.0685	NT	<0.03	<0.03	NT	NT	NT	NT	NT	NT	NT	0.047	<0.03	<0.03
09/02/2001	Zinc, dissolved	2	0.0685	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/19/2002	Zinc, dissolved	2	0.0685	NT	NT	<0.001	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/19/2002	Zinc, dissolved	2	0.0685	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/14/2003	Zinc, dissolved	2	0.0685	NT	NT	NT	NT	DRY	NT	NT	NT	NT	NT	NT	NT	NT
09/29/2003	Zinc, dissolved	2	0.0685	NT	NT	NT	NT	DRY	NT	NT	NT	NT	NT	NT	NT	NT
03/08/2004	Zinc, dissolved	2	0.0685	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/27/2004	Zinc, dissolved	2	0.0685	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

Mean	0.0515	0.03	0.0425	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	0.0445	0.04	0.04	0.031
Standard Deviation (STD)	0.0085	0	0.0105	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	0.0025	0.007	0.009	0
Mean + 2 STD	0.0685	0.03	0.0635	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	0.0495	0.054	0.058	0.031



ATTACHMENT D
Concentration Versus Time Tables & Graphs
Upper Aquifer System

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD AW	AQUIFER WELLS												
				U.A.W MW36	D.A.W MW 7	D.A.W MW 8	D.A.W MW 29	D.A.W MW 30	D.A.W MW 32	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.A.W MW 38	D.A.W MW 41	D.A.W MW 42
	ug/L															
04/23/91	1,1-Dichloroethene *	7	1				<1	<1	<1	<1	---	<1				
10/15/91	1,1-Dichloroethene *	7	1				<1	<1	<1	<1	---	<1				
01/23/92	1,1-Dichloroethene *	7	1				---	<1	<1	<1	<1	<1				
03/23/92	1,1-Dichloroethene *	7	1				<1	<1	<1	<1	<1	<1				
09/30/92	1,1-Dichloroethene *	7	1				NT	NT	NT	NT	NT	NT				
03/05/93	1,1-Dichloroethene *	7	1				NT	NT	NT	NT	NT	NT				
09/21/93	1,1-Dichloroethene *	7	1				NT	NT	NT	NT	NT	NT				
03/23/94	1,1-Dichloroethene *	7	1				NT	NT	NT	NT	NT	NT				
09/16/94	1,1-Dichloroethene *	7	1				NT	NT	NT	NT	NT	NT				
03/16/95	1,1-Dichloroethene *	7	1				NT	NT	NT	NT	NT	NT				
09/13/95	1,1-Dichloroethene *	7	1				NT	NT	NT	NT	NT	NT				
03/28/96	1,1-Dichloroethene *	7	1	<1			NT	NT	NT	NT	NT	NT	<1			
06/20/96	1,1-Dichloroethene *	7	1	<1			NT	NT	NT	NT	NT	NT	<1			
09/13/96	1,1-Dichloroethene *	7	1	<1			NT	NT	NT	NT	NT	NT	<1			
03/19/97	1,1-Dichloroethene *	7	1	NT			NT	NT	NT	NT	NT	NT	NT			
06/18/97	1,1-Dichloroethene *	7	1	<1			<1	NT	NT	NT	NT	NT	<1			
08/30/97	1,1-Dichloroethene *	7	1	NT			NT	NT	NT	NT	NT	NT	NT			
03/10/98	1,1-Dichloroethene *	7	1	NT			NT	NT	NT	NT	NT	NT	NT			
09/21/98	1,1-Dichloroethene *	7	1	NT			NT	NT	NT	NT	NT	NT	NT			
03/19/99	1,1-Dichloroethene *	7	1	NT			NT	NT	NT	NT	NT	NT	NT			
09/21/99	1,1-Dichloroethene *	7	1	NT			NT	NT	NT	NT	NT	NT	NT			
03/21/2000	1,1-Dichloroethene *	7	1	NT			NT	NT	NT	NT	NT	NT	NT			
06/28/2000	1,1-Dichloroethene *	7	1	NT	<1	<1	NT	NT	NT	NT	NT	NT	NT	<1	<1	<1
09/28/2000	1,1-Dichloroethene *	7	1	NT	<1	<1	<1	NT	NT	NT	NT	NT	DRY	<1	<1	<1
12/27/2000	1,1-Dichloroethene *	7	1	NT	<1	<1	NT	NT	NT	NT	NT	NT	NT	<1	<1	<1
03/28/2001	1,1-Dichloroethene *	7	1	NT	<1	<1	<1	NT	NT	NT	NT	NT	NT	<1	<1	<1
09/02/2001	1,1-Dichloroethene *	7	1	NT	NT	NT	<1	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/19/2002	1,1-Dichloroethene *	7	1	NT	NT	NT	<1	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/19/2002	1,1-Dichloroethene *	7	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/14/2003	1,1-Dichloroethene *	7	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/29/2003	1,1-Dichloroethene *	7	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/08/2004	1,1-Dichloroethene *	7	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/27/2004	1,1-Dichloroethene *	7	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Mean			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Standard Deviation (STD)			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Mean + 2 STD			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD AW	AQUIFER WELLS												
				U.A.W MW36	D.A.W MW 7	D.A.W MW 8	D.A.W MW 29	D.A.W MW 30	D.A.W MW 32	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.A.W MW 38	D.A.W MW 41	D.A.W MW 42
ug/L																
04/23/91	1,1,1-Trichloroethane *	200	1				<1	<1	<1	<1	---	<1				
10/15/91	1,1,1-Trichloroethane *	200	1				<1	<1	<1	<1	---	<1				
01/23/92	1,1,1-Trichloroethane *	200	1				---	<1	<1	<1	<1	<1				
03/23/92	1,1,1-Trichloroethane *	200	1				<1	<1	<1	<1	<1	<1				
09/30/92	1,1,1-Trichloroethane *	200	1				NT	NT	NT	NT	NT	NT				
03/05/93	1,1,1-Trichloroethane *	200	1				NT	NT	NT	NT	NT	NT				
09/21/93	1,1,1-Trichloroethane *	200	1				NT	NT	NT	NT	NT	NT				
03/23/94	1,1,1-Trichloroethane *	200	1				NT	NT	NT	NT	NT	NT				
09/16/94	1,1,1-Trichloroethane *	200	1				NT	NT	NT	NT	NT	NT				
03/16/95	1,1,1-Trichloroethane *	200	1				NT	NT	NT	NT	NT	NT				
09/13/95	1,1,1-Trichloroethane *	200	1				NT	NT	NT	NT	NT	NT				
03/28/96	1,1,1-Trichloroethane *	200	1	<1			NT	NT	NT	NT	NT	NT	<1			
06/20/96	1,1,1-Trichloroethane *	200	1	<1			NT	NT	NT	NT	NT	NT	<1			
09/13/96	1,1,1-Trichloroethane *	200	1	<1			NT	NT	NT	NT	NT	NT	<1			
03/19/97	1,1,1-Trichloroethane *	200	1	NT			NT	NT	NT	NT	NT	NT	NT			
06/18/97	1,1,1-Trichloroethane *	200	1	<1			<1	NT	NT	NT	NT	NT	<1			
08/30/97	1,1,1-Trichloroethane *	200	1	NT			NT	NT	NT	NT	NT	NT	NT			
03/10/98	1,1,1-Trichloroethane *	200	1	NT			NT	NT	NT	NT	NT	NT	NT			
09/21/98	1,1,1-Trichloroethane *	200	1	NT			NT	NT	NT	NT	NT	NT	NT			
03/18/99	1,1,1-Trichloroethane *	200	1	NT			NT	NT	NT	NT	NT	NT	NT			
09/21/99	1,1,1-Trichloroethane *	200	1	NT			NT	NT	NT	NT	NT	NT	NT			
03/21/2000	1,1,1-Trichloroethane *	200	1	NT			NT	NT	NT	NT	NT	NT	NT			
06/28/2000	1,1,1-Trichloroethane *	200	1	NT	<1	<1	NT	NT	NT	NT	NT	NT	NT	<1	<1	<1
09/28/2000	1,1,1-Trichloroethane *	200	1	NT	<1	<1	<1	NT	NT	NT	NT	NT	DRY	<1	<1	<1
12/27/2000	1,1,1-Trichloroethane *	200	1	NT	<1	<1	NT	NT	NT	NT	NT	NT	NT	<1	<1	<1
03/28/2001	1,1,1-Trichloroethane *	200	1	NT	<1	<1	<1	NT	NT	NT	NT	NT	NT	<1	<1	<1
09/02/2001	1,1,1-Trichloroethane *	200	1	NT	NT	NT	<1	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/19/2002	1,1,1-Trichloroethane *	200	1	NT	NT	NT	<1	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/19/2002	1,1,1-Trichloroethane *	200	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/14/2003	1,1,1-Trichloroethane *	200	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/29/2003	1,1,1-Trichloroethane *	200	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/08/2004	1,1,1-Trichloroethane *	200	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/27/2004	1,1,1-Trichloroethane *	200	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Mean				ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
Standard Deviation (STD)				ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
Mean + 2 STD				ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD AW	AQUIFER WELLS												
				U.A.W MW36	D.A.W MW 7	D.A.W MW 8	D.A.W MW 29	D.A.W MW 30	D.A.W MW 32	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.A.W MW 38	D.A.W MW 41	D.A.W MW 42
	ug/L															
04/23/91	1,2-Dichloroethane *	5	0.4				<1	<1	<1	<1	---	<1				
10/15/91	1,2-Dichloroethane *	5	0.4				<1	<1	<1	<1	---	<1				
01/23/92	1,2-Dichloroethane *	5	0.4				---	<1	<1	<1	<1	<1				
03/23/92	1,2-Dichloroethane *	5	0.4				<1	<1	<1	<1	<1	<1				
09/30/92	1,2-Dichloroethane *	5	0.4				NT	NT	NT	NT	NT	NT				
03/05/93	1,2-Dichloroethane *	5	0.4				NT	NT	NT	NT	NT	NT				
09/21/93	1,2-Dichloroethane *	5	0.4				NT	NT	NT	NT	NT	NT				
03/23/94	1,2-Dichloroethane *	5	0.4				NT	NT	NT	NT	NT	NT				
09/16/94	1,2-Dichloroethane *	5	0.4				NT	NT	NT	NT	NT	NT				
03/16/95	1,2-Dichloroethane *	5	0.4				NT	NT	NT	NT	NT	NT				
09/13/95	1,2-Dichloroethane *	5	0.4				NT	NT	NT	NT	NT	NT				
03/28/96	1,2-Dichloroethane *	5	0.4	<0.4			NT	NT	NT	NT	NT	NT	<0.4			
06/20/96	1,2-Dichloroethane *	5	0.4	<0.4			NT	NT	NT	NT	NT	NT	<0.4			
09/13/96	1,2-Dichloroethane *	5	0.4	<0.4			NT	NT	NT	NT	NT	NT	<0.4			
03/19/97	1,2-Dichloroethane *	5	0.4	<0.4			NT	NT	NT	NT	NT	NT	<0.4			
06/18/97	1,2-Dichloroethane *	5	0.4	<0.4			<0.4	NT	NT	NT	NT	NT	<0.4			
08/30/97	1,2-Dichloroethane *	5	0.4	NT			NT	NT	NT	NT	NT	NT	NT			
03/10/98	1,2-Dichloroethane *	5	0.4	NT			NT	NT	NT	NT	NT	NT	NT			
09/21/98	1,2-Dichloroethane *	5	0.4	NT			NT	NT	NT	NT	NT	NT	NT			
03/18/99	1,2-Dichloroethane *	5	0.4	NT			NT	NT	NT	NT	NT	NT	NT			
03/21/99	1,2-Dichloroethane *	5	0.4	NT			NT	NT	NT	NT	NT	NT	NT			
03/21/2000	1,2-Dichloroethane *	5	0.4	NT			NT	NT	NT	NT	NT	NT	NT			
06/28/2000	1,2-Dichloroethane *	5	0.4	NT	<0.4	<0.4	NT	NT	NT	NT	NT	NT	NT	<0.4	<0.4	<0.4
09/28/2000	1,2-Dichloroethane *	5	0.4	NT	<0.4	<0.4	<0.4	NT	NT	NT	NT	NT	DRY	<0.4	<0.4	<0.4
12/27/2000	1,2-Dichloroethane *	5	0.4	NT	<0.4	<0.4	NT	NT	NT	NT	NT	NT	NT	<0.4	<0.4	<0.4
03/28/2001	1,2-Dichloroethane *	5	0.4	NT	<0.4	<0.4	<0.4	NT	NT	NT	NT	NT	NT	<0.4	<0.4	<0.4
09/02/2001	1,2-Dichloroethane *	5	0.4	NT	NT	NT	<0.4	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/19/2002	1,2-Dichloroethane *	5	0.4	NT	NT	NT	<0.4	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/19/2002	1,2-Dichloroethane *	5	0.4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/14/2003	1,2-Dichloroethane *	5	0.4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/29/2003	1,2-Dichloroethane *	5	0.4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/08/2004	1,2-Dichloroethane *	5	0.4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/27/2004	1,2-Dichloroethane *	5	0.4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Mean			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Standard Deviation (STD)			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Mean + 2 STD			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

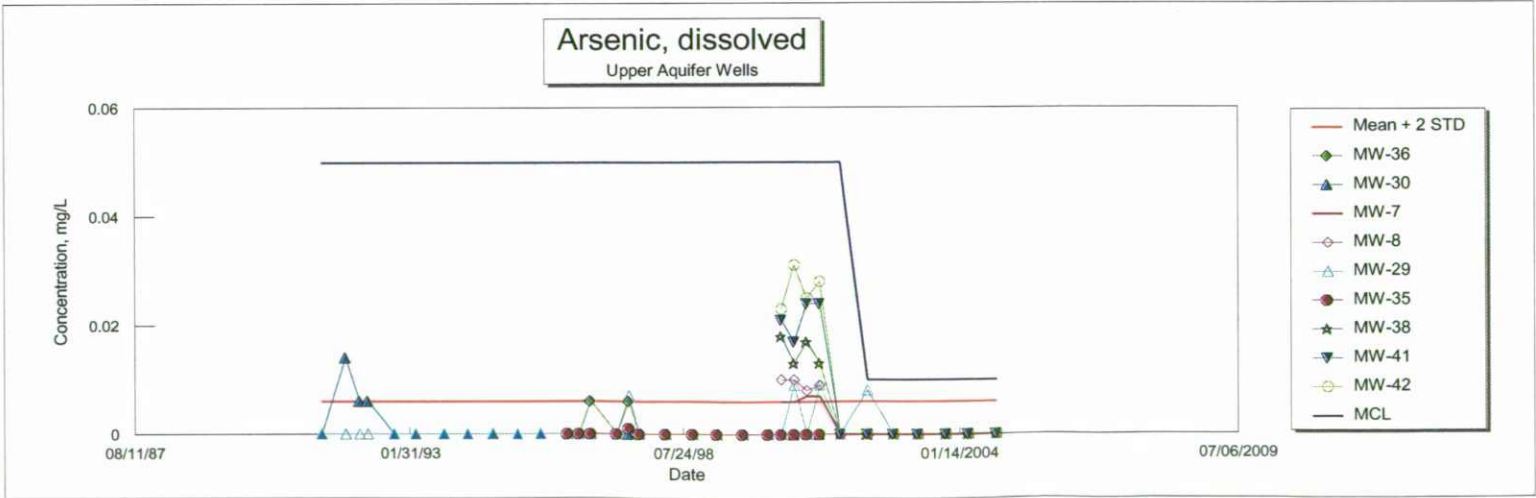
DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD AW	AQUIFER WELLS												
				U.A.W MW36	D.A.W MW 7	D.A.W MW 8	D.A.W MW 29	D.A.W MW 30	D.A.W MW 32	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.A.W MW 38	D.A.W MW 41	D.A.W MW 42
	ug/L															
04/23/91	1,4-Dichlorobenzene *	75	1				<1	<1	<1	<1	---	<1				
10/15/91	1,4-Dichlorobenzene *	75	1				<1	<1	<1	<1	---	<1				
01/23/92	1,4-Dichlorobenzene *	75	1				---	<1	<1	<1	<1	<1				
03/23/92	1,4-Dichlorobenzene *	75	1				<1	<1	<1	<1	<1	<1				
09/30/92	1,4-Dichlorobenzene *	75	1				NT	NT	NT	NT	NT	NT				
03/05/93	1,4-Dichlorobenzene *	75	1				NT	NT	NT	NT	NT	NT				
09/21/93	1,4-Dichlorobenzene *	75	1				NT	NT	NT	NT	NT	NT				
03/23/94	1,4-Dichlorobenzene *	75	1				NT	NT	NT	NT	NT	NT				
09/16/94	1,4-Dichlorobenzene *	75	1				NT	NT	NT	NT	NT	NT				
03/16/95	1,4-Dichlorobenzene *	75	1				NT	NT	NT	NT	NT	NT				
09/13/95	1,4-Dichlorobenzene *	75	1				NT	NT	NT	NT	NT	NT				
03/28/96	1,4-Dichlorobenzene *	75	1	<1			NT	NT	NT	NT	NT	NT	<1			
06/20/96	1,4-Dichlorobenzene *	75	1	<1			NT	NT	NT	NT	NT	NT	<1			
09/13/96	1,4-Dichlorobenzene *	75	1	<1			NT	NT	NT	NT	NT	NT	<1			
03/19/97	1,4-Dichlorobenzene *	75	1	NT			NT	NT	NT	NT	NT	NT	NT			
06/18/97	1,4-Dichlorobenzene *	75	1	<1			<1	NT	NT	NT	NT	NT	<1			
08/30/97	1,4-Dichlorobenzene *	75	1	NT			NT	NT	NT	NT	NT	NT	NT			
03/10/98	1,4-Dichlorobenzene *	75	1	NT			NT	NT	NT	NT	NT	NT	NT			
09/21/98	1,4-Dichlorobenzene *	75	1	NT			NT	NT	NT	NT	NT	NT	NT			
03/18/99	1,4-Dichlorobenzene *	75	1	NT			NT	NT	NT	NT	NT	NT	NT			
09/21/99	1,4-Dichlorobenzene *	75	1	NT			NT	NT	NT	NT	NT	NT	NT			
03/21/2000	1,4-Dichlorobenzene *	75	1	NT			NT	NT	NT	NT	NT	NT	NT			
06/28/2000	1,4-Dichlorobenzene *	75	1	NT	<1	<1	NT	NT	NT	NT	NT	NT	NT	<1	<1	<1
09/28/2000	1,4-Dichlorobenzene *	75	1	NT	<1	<1	<1	NT	NT	NT	NT	NT	DRY	<1	<1	<1
12/27/2000	1,4-Dichlorobenzene *	75	1	NT	<1	<1	NT	NT	NT	NT	NT	NT	NT	<1	<1	<1
03/28/2001	1,4-Dichlorobenzene *	75	1	NT	<1	<1	<1	NT	NT	NT	NT	NT	NT	<1	<1	<1
09/02/2001	1,4-Dichlorobenzene *	75	1	NT	NT	NT	<1	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/19/2002	1,4-Dichlorobenzene *	75	1	NT	NT	NT	<1	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/19/2002	1,4-Dichlorobenzene *	75	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/14/2003	1,4-Dichlorobenzene *	75	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/29/2003	1,4-Dichlorobenzene *	75	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/08/2004	1,4-Dichlorobenzene *	75	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/27/2004	1,4-Dichlorobenzene *	75	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Mean			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Standard Deviation (STD)			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Mean + 2 STD			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD AW	AQUIFER WELLS													
				U.A.W MW36	D.A.W MW 7	D.A.W MW 8	D.A.W MW 29	D.A.W MW 30	D.A.W MW 32	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.A.W MW 38	D.A.W MW 41	D.A.W MW 42	
	mg/L																
04/23/91	Arsenic, dissolved	0.05	0.006				<0.005	<0.023	<0.005	<0.005	---	<0.005					
10/15/91	Arsenic, dissolved	0.05	0.006				<0.005	0.014	<0.005	<0.005	---	<0.005					
01/23/92	Arsenic, dissolved	0.05	0.006				---	0.006	<0.005	<0.005	<0.005	<0.005					
03/23/92	Arsenic, dissolved	0.05	0.006				<0.005	0.006	<0.005	<0.005	<0.005	<0.005					
09/30/92	Arsenic, dissolved	0.05	0.006				NT	NT	NT	NT	NT	NT					
03/05/93	Arsenic, dissolved	0.05	0.006				NT	NT	NT	NT	NT	NT					
09/21/93	Arsenic, dissolved	0.05	0.006				NT	NT	NT	NT	NT	NT					
03/23/94	Arsenic, dissolved	0.05	0.006				NT	NT	NT	NT	NT	NT					
09/16/94	Arsenic, dissolved	0.05	0.006				NT	NT	NT	NT	NT	NT					
03/16/95	Arsenic, dissolved	0.05	0.006				NT	NT	NT	NT	NT	NT					
09/13/95	Arsenic, dissolved	0.05	0.006				NT	NT	NT	NT	NT	NT					
03/28/96	Arsenic, dissolved	0.05	0.006	<0.005			NT	NT	NT	NT	NT	NT	<0.005				
06/20/96	Arsenic, dissolved	0.05	0.006	<0.005			NT	NT	NT	NT	NT	NT	<0.005				
09/13/96	Arsenic, dissolved	0.05	0.006	0.006			NT	NT	NT	NT	NT	NT	<0.005				
03/19/97	Arsenic, dissolved	0.05	0.006	NT			NT	NT	NT	NT	NT	NT	NT				
06/18/97	Arsenic, dissolved	0.05	0.006	0.006			0.007	NT	NT	NT	NT	NT	0.001				
08/30/97	Arsenic, dissolved	0.05	0.006	NT			NT	NT	NT	NT	NT	NT	NT				
03/10/98	Arsenic, dissolved	0.05	0.006	NT			NT	NT	NT	NT	NT	NT	NT				
09/21/98	Arsenic, dissolved	0.05	0.006	NT			NT	NT	NT	NT	NT	NT	NT				
03/18/99	Arsenic, dissolved	0.05	0.006	NT			NT	NT	NT	NT	NT	NT	NT				
09/21/99	Arsenic, dissolved	0.05	0.006	NT			NT	NT	NT	NT	NT	NT	NT				
03/21/2000	Arsenic, dissolved	0.05	0.006	NT			NT	NT	NT	NT	NT	NT	NT				
06/28/2000	Arsenic, dissolved	0.05	0.006	NT	0.006	0.01	NT	NT	NT	NT	NT	NT	NT	0.018	0.021	0.023	
09/28/2000	Arsenic, dissolved	0.05	0.006	NT	0.006	0.01	0.009	NT	NT	NT	NT	NT	DRY	0.013	0.017	0.031	
12/27/2000	Arsenic, dissolved	0.05	0.006	NT	0.007	0.008	NT	NT	NT	NT	NT	NT	NT	0.017	0.024	0.025	
03/28/2001	Arsenic, dissolved	0.05	0.006	NT	0.007	0.009	0.009	NT	NT	NT	NT	NT	NT	0.013	0.024	0.028	
09/02/2001	Arsenic, dissolved	0.05	0.006	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
03/19/2002	Arsenic, dissolved	0.01	0.006	NT	NT	NT	0.008	NT	NT	NT	NT	NT	NT	NT	NT	NT	
09/19/2002	Arsenic, dissolved	0.01	0.006	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
03/14/2003	Arsenic, dissolved	0.01	0.006	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
09/29/2003	Arsenic, dissolved	0.01	0.006	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
03/08/2004	Arsenic, dissolved	0.01	0.006	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
09/27/2004	Arsenic, dissolved	0.01	0.006	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	

Mean	0.006	0.0065	0.00925	0.00825	0.008667	ERR	ERR	ERR	ERR	0.001	0.01525	0.0215	0.02675
Standard Deviation (STD)	0	0.0005	0.000829	0.000829	0.003771	ERR	ERR	ERR	ERR	0	0.002278	0.002872	0.003031
Mean + 2 STD	0.006	0.0075	0.010908	0.009908	0.016209	ERR	ERR	ERR	ERR	0.001	0.019805	0.027245	0.032812

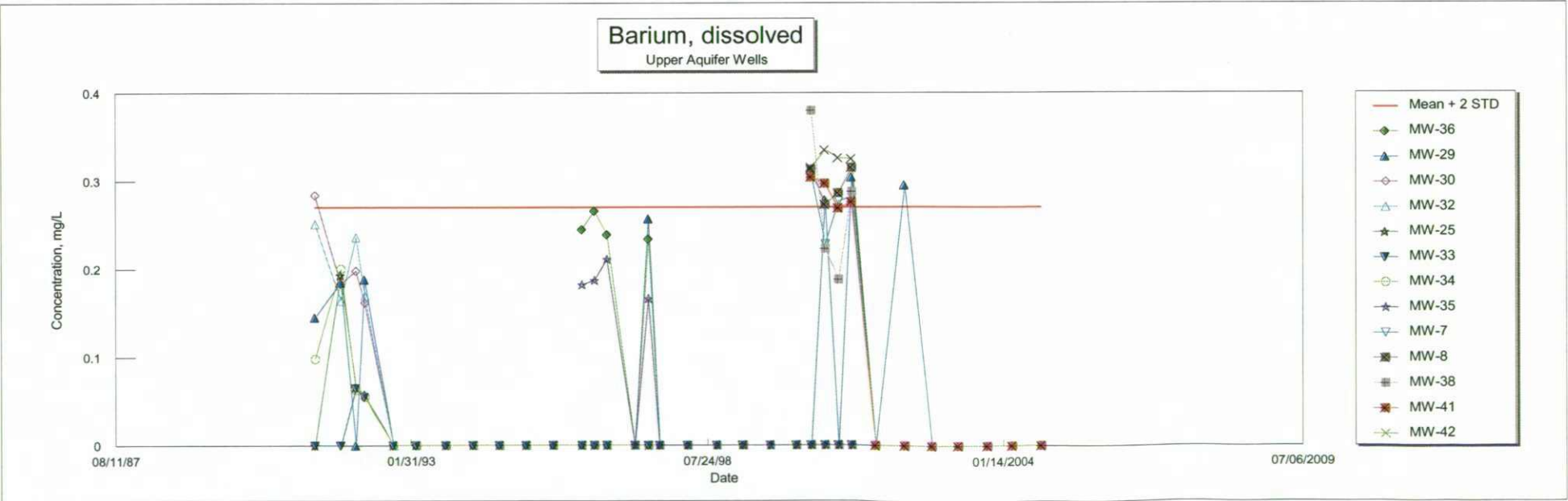


AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD AW	AQUIFER WELLS												
				U.A.W MW36	D.A.W MW 7	D.A.W MW 8	D.A.W MW 29	D.A.W MW 30	D.A.W MW 32	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.A.W MW 38	D.A.W MW 41	D.A.W MW 42
04/23/91	Barium, dissolved	2.000	0.270				0.145	0.284	0.251	0.140	---	0.098				
10/15/91	Barium, dissolved	2.000	0.270				0.185	0.183	0.164	0.193	---	0.200				
01/23/92	Barium, dissolved	2.000	0.270				---	0.198	0.236	0.066	0.065	0.063				
03/23/92	Barium, dissolved	2.000	0.270				0.188	0.162	0.170	0.058	0.055	0.055				
09/30/92	Barium, dissolved	2.000	0.270				NT	NT	NT	NT	NT	NT				
03/05/93	Barium, dissolved	2.000	0.270				NT	NT	NT	NT	NT	NT				
09/21/93	Barium, dissolved	2.000	0.270				NT	NT	NT	NT	NT	NT				
03/23/94	Barium, dissolved	2.000	0.270				NT	NT	NT	NT	NT	NT				
09/16/94	Barium, dissolved	2.000	0.270				NT	NT	NT	NT	NT	NT				
03/16/95	Barium, dissolved	2.000	0.270				NT	NT	NT	NT	NT	NT				
09/13/95	Barium, dissolved	2.000	0.270				NT	NT	NT	NT	NT	NT				
03/28/96	Barium, dissolved	2.000	0.270	0.245			NT	NT	NT	NT	NT	NT	0.182			
06/20/96	Barium, dissolved	2.000	0.270	0.266			NT	NT	NT	NT	NT	NT	0.187			
09/13/96	Barium, dissolved	2.000	0.270	0.239			NT	NT	NT	NT	NT	NT	0.211			
03/19/97	Barium, dissolved	2.000	0.270	NT			NT	NT	NT	NT	NT	NT	NT			
06/18/97	Barium, dissolved	2.000	0.270	0.234			0.257	NT	NT	NT	NT	NT	0.166			
08/30/97	Barium, dissolved	2.000	0.270	NT			NT	NT	NT	NT	NT	NT	NT			
03/10/98	Barium, dissolved	2.000	0.270	NT			NT	NT	NT	NT	NT	NT	NT			
09/21/98	Barium, dissolved	2.000	0.270	NT			NT	NT	NT	NT	NT	NT	NT			
03/18/99	Barium, dissolved	2.000	0.270	NT			NT	NT	NT	NT	NT	NT	NT			
09/21/99	Barium, dissolved	2.000	0.270	NT			NT	NT	NT	NT	NT	NT	NT			
03/21/2000	Barium, dissolved	2.000	0.270	NT			NT	NT	NT	NT	NT	NT	NT			
06/28/2000	Barium, dissolved	2.000	0.270	NT	0.307	0.313	NT	NT	NT	NT	NT	NT	NT	0.380	0.304	0.315
09/28/2000	Barium, dissolved	2.000	0.270	NT	0.228	0.273	0.278	NT	NT	NT	NT	NT	DRY	0.223	0.297	0.335
12/27/2000	Barium, dissolved	2.000	0.270	NT	0.277	0.286	NT	NT	NT	NT	NT	NT	NT	0.188	0.269	0.326
03/28/2001	Barium, dissolved	2.000	0.270	NT	0.282	0.315	0.304	NT	NT	NT	NT	NT	NT	0.288	0.276	0.325
09/02/2001	Barium, dissolved	2.000	0.270	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/19/2002	Barium, dissolved	2.000	0.270	NT	NT	NT	0.295	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/19/2002	Barium, dissolved	2.000	0.270	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/14/2003	Barium, dissolved	2.000	0.270	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/29/2003	Barium, dissolved	2.000	0.270	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/08/2004	Barium, dissolved	2.000	0.270	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/27/2004	Barium, dissolved	2.000	0.270	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

Mean	0.246	0.2735	0.29675	0.236	0.20675	0.20525	0.11425	0.06	0.104	0.1865	0.26975	0.2865	0.32525
Standard Deviation (STD)	0.012186	0.028623	0.017866	0.057936	0.046397	0.038674	0.05558	0.005	0.057736	0.016132	0.07307	0.014431	0.007084
Mean + 2 STD	0.270372	0.330745	0.332482	0.351872	0.299544	0.282598	0.225411	0.07	0.219473	0.218765	0.415889	0.315362	0.339419



AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD AW	AQUIFER WELLS												
				U.A.W MW36	D.A.W MW 7	D.A.W MW 8	D.A.W MW 29	D.A.W MW 30	D.A.W MW 32	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.A.W MW 38	D.A.W MW 41	D.A.W MW 42
	ug/L															
04/23/91	Benzene *	5	1				<1	<1	<1	<1	---	<1				
10/15/91	Benzene *	5	1				<1	<1	<1	<1	---	<1				
01/23/92	Benzene *	5	1				---	<1	<1	<1	<1	<1				
03/23/92	Benzene *	5	1				<1	<1	<1	<1	<1	<1				
09/30/92	Benzene *	5	1				NT	NT	NT	NT	NT	NT				
03/05/93	Benzene *	5	1				NT	NT	NT	NT	NT	NT				
09/21/93	Benzene *	5	1				NT	NT	NT	NT	NT	NT				
03/23/94	Benzene *	5	1				NT	NT	NT	NT	NT	NT				
09/16/94	Benzene *	5	1				NT	NT	NT	NT	NT	NT				
03/16/95	Benzene *	5	1				NT	NT	NT	NT	NT	NT				
09/13/95	Benzene *	5	1				NT	NT	NT	NT	NT	NT				
03/28/96	Benzene *	5	1	<1			NT	NT	NT	NT	NT	NT	<1			
06/20/96	Benzene *	5	1	<1			NT	NT	NT	NT	NT	NT	<1			
09/13/96	Benzene *	5	1	<1			NT	NT	NT	NT	NT	NT	<1			
03/19/97	Benzene *	5	1	NT			NT	NT	NT	NT	NT	NT	NT			
06/18/97	Benzene *	5	1	<1			<1	NT	NT	NT	NT	NT	<1			
08/30/97	Benzene *	5	1	NT			NT	NT	NT	NT	NT	NT	NT			
03/10/98	Benzene *	5	1	NT			NT	NT	NT	NT	NT	NT	NT			
09/21/98	Benzene *	5	1	NT			NT	NT	NT	NT	NT	NT	NT			
03/18/99	Benzene *	5	1	NT			NT	NT	NT	NT	NT	NT	NT			
09/21/99	Benzene *	5	1	NT			NT	NT	NT	NT	NT	NT	NT			
03/21/2000	Benzene *	5	1	NT			NT	NT	NT	NT	NT	NT	NT			
06/28/2000	Benzene *	5	1	NT	<1	<1	NT	NT	NT	NT	NT	NT	NT	<1	<1	<1
09/28/2000	Benzene *	5	1	NT	<1	<1	<1	NT	NT	NT	NT	NT	DRY	<1	<1	<1
12/27/2000	Benzene *	5	1	NT	<1	<1	NT	NT	NT	NT	NT	NT	NT	<1	<1	<1
03/28/2001	Benzene *	5	1	NT	<1	<1	<1	NT	NT	NT	NT	NT	NT	<1	<1	<1
09/02/2001	Benzene *	5	1	NT	NT	NT	<1	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/19/2002	Benzene *	5	1	NT	NT	NT	<1	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/19/2002	Benzene *	5	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/14/2003	Benzene *	5	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/29/2003	Benzene *	5	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/08/2004	Benzene *	5	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/27/2004	Benzene *	5	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Mean			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Standard Deviation (STD)			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Mean + 2 STD			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD AW	AQUIFER WELLS												
				U.A.W MW36	D.A.W MW 7	D.A.W MW 8	D.A.W MW 29	D.A.W MW 30	D.A.W MW 32	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.A.W MW 38	D.A.W MW 41	D.A.W MW 42
	mg/L															
04/23/91	Cadmium, dissolved	0.005	0.001				<0.001	<0.001	<0.001	<0.001	---	<0.001				
10/15/91	Cadmium, dissolved	0.005	0.001				<0.001	<0.001	<0.001	<0.001	---	<0.001				
01/23/92	Cadmium, dissolved	0.005	0.001				---	<0.001	<0.001	<0.001	<0.001	<0.001				
03/23/92	Cadmium, dissolved	0.005	0.001				<0.001	<0.001	<0.001	<0.001	<0.001	<0.001				
09/30/92	Cadmium, dissolved	0.005	0.001				NT	NT	NT	NT	NT	NT				
03/05/93	Cadmium, dissolved	0.005	0.001				NT	NT	NT	NT	NT	NT				
09/21/93	Cadmium, dissolved	0.005	0.001				NT	NT	NT	NT	NT	NT				
03/23/94	Cadmium, dissolved	0.005	0.001				NT	NT	NT	NT	NT	NT				
09/16/94	Cadmium, dissolved	0.005	0.001				NT	NT	NT	NT	NT	NT				
03/16/95	Cadmium, dissolved	0.005	0.001				NT	NT	NT	NT	NT	NT				
09/13/95	Cadmium, dissolved	0.005	0.001				NT	NT	NT	NT	NT	NT				
03/28/96	Cadmium, dissolved	0.005	0.001	<0.001			NT	NT	NT	NT	NT	NT	<0.001			
06/20/96	Cadmium, dissolved	0.005	0.001	<0.001			NT	NT	NT	NT	NT	NT	<0.001			
09/13/96	Cadmium, dissolved	0.005	0.001	<0.001			NT	NT	NT	NT	NT	NT	<0.001			
03/19/97	Cadmium, dissolved	0.005	0.001	<0.001			NT	NT	NT	NT	NT	NT	<0.001			
06/18/97	Cadmium, dissolved	0.005	0.001	<0.001			<0.001	NT	NT	NT	NT	NT	<0.001			
08/30/97	Cadmium, dissolved	0.005	0.001	NT			NT	NT	NT	NT	NT	NT	NT			
03/10/98	Cadmium, dissolved	0.005	0.001	NT			NT	NT	NT	NT	NT	NT	NT			
09/21/98	Cadmium, dissolved	0.005	0.001	NT			NT	NT	NT	NT	NT	NT	NT			
03/18/99	Cadmium, dissolved	0.005	0.001	NT			NT	NT	NT	NT	NT	NT	NT			
09/21/99	Cadmium, dissolved	0.005	0.001	NT			NT	NT	NT	NT	NT	NT	NT			
03/21/2000	Cadmium, dissolved	0.005	0.001	NT			NT	NT	NT	NT	NT	NT	NT			
06/28/2000	Cadmium, dissolved	0.005	0.001	NT	<0.001	<0.001	NT	NT	NT	NT	NT	NT	NT	<0.001	<0.001	<0.001
09/28/2000	Cadmium, dissolved	0.005	0.001	NT	<0.001	<0.001	<0.001	NT	NT	NT	NT	NT	NT	<0.001	<0.001	<0.001
12/27/2000	Cadmium, dissolved	0.005	0.001	NT	<0.001	<0.001	NT	NT	NT	NT	NT	NT	NT	<0.001	<0.001	<0.001
03/28/2001	Cadmium, dissolved	0.005	0.001	NT	<0.001	<0.001	<0.001	NT	NT	NT	NT	NT	NT	<0.001	<0.001	<0.001
09/02/2001	Cadmium, dissolved	0.005	0.001	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/19/2002	Cadmium, dissolved	0.005	0.001	NT	NT	NT	<0.001	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/19/2002	Cadmium, dissolved	0.005	0.001	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/14/2003	Cadmium, dissolved	0.005	0.001	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/29/2003	Cadmium, dissolved	0.005	0.001	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/08/2004	Cadmium, dissolved	0.005	0.001	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/27/2004	Cadmium, dissolved	0.005	0.001	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Mean			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Standard Deviation (STD)			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Mean + 2 STD			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

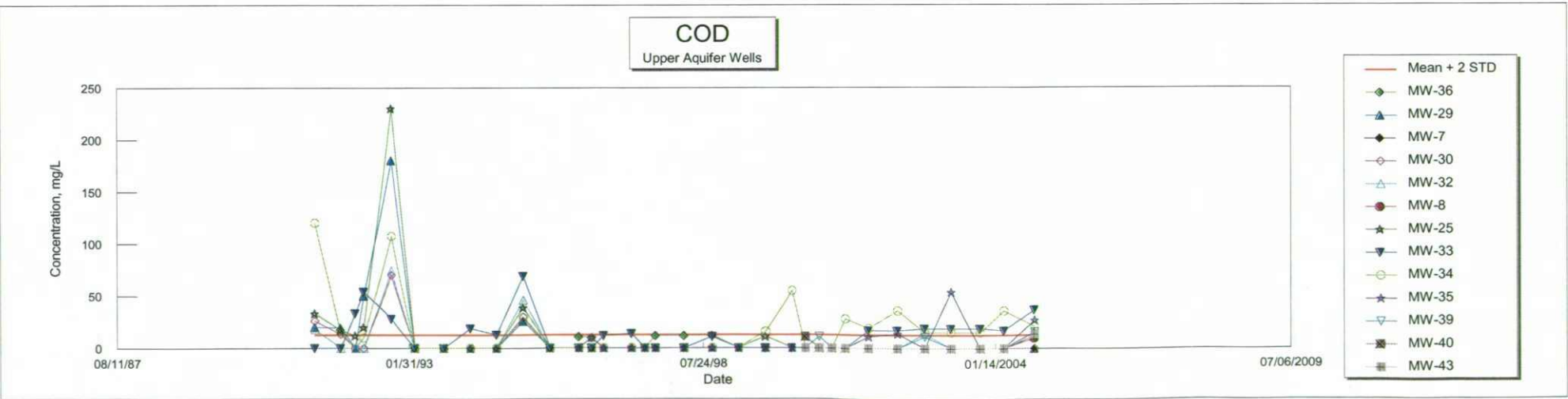
DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD AW	AQUIFER WELLS												
				U.A.W MW36	D.A.W MW 7	D.A.W MW 8	D.A.W MW 29	D.A.W MW 30	D.A.W MW 32	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.A.W MW 38	D.A.W MW 41	D.A.W MW 42
	ug/L															
04/23/91	Carbon tetrachloride *	5	0.3				<1	<1	<1	<1	---	<1				
10/15/91	Carbon tetrachloride *	5	0.3				<1	<1	<1	<1	---	<1				
01/23/92	Carbon tetrachloride *	5	0.3				---	<1	<1	<1	<1	<1				
03/23/92	Carbon tetrachloride *	5	0.3				<1	<1	<1	<1	<1	<1				
09/30/92	Carbon tetrachloride *	5	0.3				NT	NT	NT	NT	NT	NT				
03/05/93	Carbon tetrachloride *	5	0.3				NT	NT	NT	NT	NT	NT				
09/21/93	Carbon tetrachloride *	5	0.3				NT	NT	NT	NT	NT	NT				
03/23/94	Carbon tetrachloride *	5	0.3				NT	NT	NT	NT	NT	NT				
09/16/94	Carbon tetrachloride *	5	0.3				NT	NT	NT	NT	NT	NT				
03/16/95	Carbon tetrachloride *	5	0.3				NT	NT	NT	NT	NT	NT				
09/13/95	Carbon tetrachloride *	5	0.3				NT	NT	NT	NT	NT	NT				
03/28/96	Carbon tetrachloride *	5	0.3	<0.3			NT	NT	NT	NT	NT	NT	<0.3			
06/20/96	Carbon tetrachloride *	5	0.3	<0.3			NT	NT	NT	NT	NT	NT	<0.3			
09/13/96	Carbon tetrachloride *	5	0.3	<0.3			NT	NT	NT	NT	NT	NT	<0.3			
03/19/97	Carbon tetrachloride *	5	0.3	NT			NT	NT	NT	NT	NT	NT	NT			
06/18/97	Carbon tetrachloride *	5	0.3	<0.3			<0.3	NT	NT	NT	NT	NT	<0.3			
08/30/97	Carbon tetrachloride *	5	0.3	NT			NT	NT	NT	NT	NT	NT	NT			
03/10/98	Carbon tetrachloride *	5	0.3	NT			NT	NT	NT	NT	NT	NT	NT			
09/21/98	Carbon tetrachloride *	5	0.3	NT			NT	NT	NT	NT	NT	NT	NT			
03/18/99	Carbon tetrachloride *	5	0.3	NT			NT	NT	NT	NT	NT	NT	NT			
09/21/99	Carbon tetrachloride *	5	0.3	NT			NT	NT	NT	NT	NT	NT	NT			
03/21/2000	Carbon tetrachloride *	5	0.3	NT			NT	NT	NT	NT	NT	NT	NT			
06/28/2000	Carbon tetrachloride *	5	0.3	NT	<0.3	<0.3	NT	NT	NT	NT	NT	NT	NT	<0.3	<0.3	<0.3
09/28/2000	Carbon tetrachloride *	5	0.3	NT	<0.3	<0.3	<0.3	NT	NT	NT	NT	NT	DRY	<0.3	<0.3	<0.3
12/27/2000	Carbon tetrachloride *	5	0.3	NT	<0.3	<0.3	NT	NT	NT	NT	NT	NT	NT	<0.3	<0.3	<0.3
03/28/2001	Carbon tetrachloride *	5	0.3	NT	<0.3	<0.3	<0.3	NT	NT	NT	NT	NT	NT	<0.3	<0.3	<0.3
09/02/2001	Carbon tetrachloride *	5	0.3	NT	NT	NT	<0.3	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/19/2002	Carbon tetrachloride *	5	0.3	NT	NT	NT	<0.3	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/19/2002	Carbon tetrachloride *	5	0.3	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/14/2003	Carbon tetrachloride *	5	0.3	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/29/2003	Carbon tetrachloride *	5	0.3	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/08/2004	Carbon tetrachloride *	5	0.3	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/27/2004	Carbon tetrachloride *	5	0.3	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Mean			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Standard Deviation (STD)			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Mean + 2 STD			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER mg/L	ACTION LEVEL	MEAN + 2 STD AW	AQUIFER WELLS												
				U.A.W MW36	D.A.W MW 7	D.A.W MW 8	D.A.W MW 29	D.A.W MW 30	D.A.W MW 32	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.A.W MW 38	D.A.W MW 41	D.A.W MW 42
04/23/91	Chemical Oxygen Demand	--	13				20.1	26.3	18	33.4	---	120.1				
10/15/91	Chemical Oxygen Demand	--	13				19.4	13.5	<10	17.2	---	14.3				
01/23/92	Chemical Oxygen Demand	--	13				---	<10	<10	12	33.4	<10				
03/23/92	Chemical Oxygen Demand	--	13				50	<10	<10	20	54	10				
09/30/92	Chemical Oxygen Demand	--	13				180	70	74	230	28	107				
03/05/93	Chemical Oxygen Demand	--	13				---	<10	<10	<10	<10	<10				
09/21/93	Chemical Oxygen Demand	--	13				<10	<10	<10	<10	<10	<10				
03/23/94	Chemical Oxygen Demand	--	13				<10	<10	<10	<10	19	<10				
09/16/94	Chemical Oxygen Demand	--	13				<10	<10	<10	<10	13	<10				
03/16/95	Chemical Oxygen Demand	--	13				26	30	46	39	69	29				
09/13/95	Chemical Oxygen Demand	--	13				<10	<10	<10	<10	<10	<10				
03/28/96	Chemical Oxygen Demand	--	13	11			<10	<10	<10	<10	<10	<10	<10			
06/20/96	Chemical Oxygen Demand	--	13	10			NT	NT	NT	NT	NT	NT	10			
09/13/96	Chemical Oxygen Demand	--	13	<10			<10	<10	<10	<10	12	<10	<10			
03/19/97	Chemical Oxygen Demand	--	13	<10			<10	<10	<10	<10	14	<10	<10			
06/18/97	Chemical Oxygen Demand	--	13	<10			<10	NT	NT	NT	NT	NT	<10			
08/30/97	Chemical Oxygen Demand	--	13	12			<10	<10	<10	<10	<10	<10	<10			
03/10/98	Chemical Oxygen Demand	--	13	12			<10	<10	<10	<10	<10	<10	<10			
09/21/98	Chemical Oxygen Demand	--	13	12			<10	<10	<10	<10	<10	<10	<10			
03/18/99	Chemical Oxygen Demand	--	13	<10			<10	<10	<10	<10	<10	<10	<10			
09/21/99	Chemical Oxygen Demand	--	13	<10			<10	<10	<10	<10	<10	<10	<10			
03/21/2000	Chemical Oxygen Demand	--	13	NT			<10	<10	<10	<10	<10	55	NT			
06/28/2000	Chemical Oxygen Demand	--	13	NT	<10	11	NT	NT	NT	NT	NT	NT	NT	<10	11	<10
09/28/2000	Chemical Oxygen Demand	--	13	<10	<10	<10	<10	<10	<10	<10	<10	<10	DRY	11	<10	<10
12/27/2000	Chemical Oxygen Demand	--	13	NT	<10	<10	NT	NT	NT	NT	NT	NT	NT	<10	<10	<10
03/28/2001	Chemical Oxygen Demand	--	13	<10	<10	<10	<10	<10	<10	<10	<10	28	<10	<10	<10	<10
09/02/2001	Chemical Oxygen Demand	--	13	<10	<10	<10	<10	<10	<10	<10	17	19	11	<10	<10	<10
03/19/2002	Chemical Oxygen Demand	--	13	<10	<10	<10	<10	<10	<10	<10	17	36	14	<10	<10	<10
09/19/2002	Chemical Oxygen Demand	--	13	<10	<10	<10	<10	<10	14	<10	19	15	<10	11	<10	<10
03/14/2003	Chemical Oxygen Demand	--	13	<10	<10	<10	<10	<10	<10	<10	28	55	54	<10	<10	<10
09/29/2003	Chemical Oxygen Demand	--	13	<10	<10	<10	<10	<10	<10	<10	18	17	<10	<10	<10	<10
03/08/2004	Chemical Oxygen Demand	--	13	<10	<10	<10	<10	<10	<10	<10	17	36	<10	<10	<10	<10
09/27/2004	Chemical Oxygen Demand	--	13	<10	<10	10	<10	<10	16	16	37	21	27	16	12	14

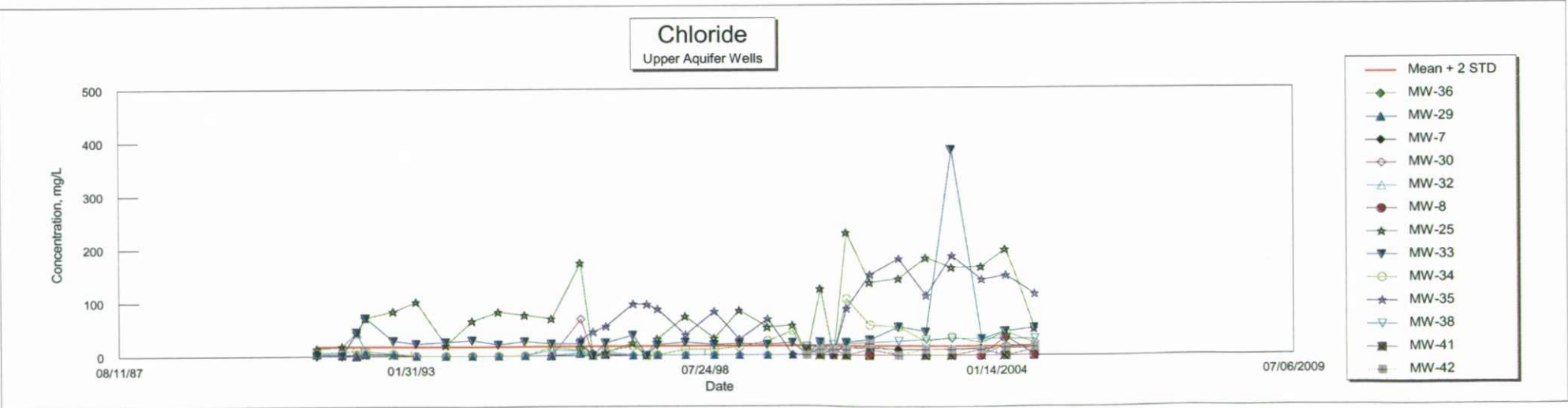
Mean	11.4	ERR	10.5	59.1	34.95	33.6	52.51429	26.24286	41.45	23.2	12.66667	11.5	14
Standard Deviation (STD)	0.8	ERR	0.5	61.46921	21.14196	23.33752	73.0246	16.31374	34.17878	16.55778	2.357023	0.5	0
Mean + 2 STD	13	ERR	11.5	182.0384	77.23392	80.27505	198.5635	58.87034	109.8076	56.31556	17.38071	12.5	14



AMES-STORY ENVIRONMENTAL LANDFILL
MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	Secondary MCL LEVEL	MEAN + 2 STD AW	AQUIFER WELLS												
				U.A.W MW36	D.A.W MW 7	D.A.W MW 8	D.A.W MW 29	D.A.W MW 30	D.A.W MW 32	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.A.W MW 38	D.A.W MW 41	D.A.W MW 42
04/23/91	Chloride	250	17.2443				4	2	6.5	13.5	---	6				
10/15/91	Chloride	250	17.2443				1.89	1.41	4.24	17.4	---	6.6				
01/23/92	Chloride	250	17.2443				---	2.6	42.4	43.5		10				
03/23/92	Chloride	250	17.2443				3.7	2.6	8.5	70.8	70.8	9				
09/30/92	Chloride	250	17.2443				3	2	4	83	28	3				
03/05/93	Chloride	250	17.2443				---	<10	<10	101	22.5	<10				
09/21/93	Chloride	250	17.2443				<10	<10	<10	20	26	<10				
03/23/94	Chloride	250	17.2443				<10	<10	<10	65.1	29.2	<10				
09/16/94	Chloride	250	17.2443				<10	<10	<10	82	21	<10				
03/16/95	Chloride	250	17.2443				<10	<10	<10	76	27	<10				
09/13/95	Chloride	250	17.2443				<10	<10	10	69	22	15				
03/28/96	Chloride	250	17.2443	14			4.2	68	8.2	173	22	8.9	30			
06/20/96	Chloride	250	17.2443	3.8			NT	NT	NT	NT	NT	NT	44			
09/13/96	Chloride	250	17.2443	1.7			2.2	2.6	7.3	5.3	23.6	7.1	54.2			
03/19/97	Chloride	250	17.2443	<10			<10	<10	<10	23	38	17	96			
06/18/97	Chloride	250	17.2443	<10			<10	NT	NT	NT	NT	NT	95			
08/30/97	Chloride	250	17.2443	<10			<10	<10	<10	30	19	<10	86			
03/10/98	Chloride	250	17.2443	<10			<10	<10	<10	72	24	10	37			
09/21/98	Chloride	250	17.2443	<10			<10	<10	<10	31	19	10	81			
03/18/99	Chloride	250	17.2443	<10			<10	<10	<10	83	21	15	29			
09/21/99	Chloride	250	17.2443	<10			<10	<10	<10	52	20	26	67			
03/21/2000	Chloride	250	17.2443	NT			<10	<10	<10	55	23	45	NT			
06/28/2000	Chloride	250	17.2443	NT	<10	<10	NT	NT	NT	NT	NT	NT	NT	15	11	<10
09/28/2000	Chloride	250	17.2443	<10	11	<10	<10	<10	<10	124	24	13	DRY	18	<10	10
12/27/2000	Chloride	250	17.2443	NT	10	<10	NT	NT	NT	NT	NT	NT	NT	19	10	10
03/28/2001	Chloride	250	17.2443	<10	13	<10	<10	<10	<10	229	24	105	87	21	<10	10
09/02/2001	Chloride	250	17.2443	<10	14	<10	<10	<10	10	135	29	56	150	23	10	21
03/19/2002	Chloride	250	17.2443	<10	11	<10	<10	<10	<10	142	53	52	179	26	<10	<10
09/19/2002	Chloride	250	17.2443	<10	11	<10	<10	<10	<10	181	44	25	111	29	<10	11
03/14/2003	Chloride	250	17.2443	<10	12	<10	<10	<10	<10	163	383	34	185	31	<10	11
09/29/2003	Chloride	250	17.2443	<10	13	<10	<10	<10	<10	165	30	23	141	31	10	11
03/08/2004	Chloride	250	17.2443	<10	14	34	<10	<10	19	197	45	43	149	31	<10	15
09/27/2004	Chloride	250	17.2443	<10	14	<10	<10	<10	15	49	51	21	114	30	11	16

Mean	6.5	12.3	34	3.165	11.60143	12.28545	87.95172	43.84074	24.37391	96.4	24.90909	10.4	12.77778
Standard Deviation (STD)	5.37215	1.417745	0	0.879275	23.02829	10.41202	60.50629	67.68291	22.85033	47.80246	5.680182	0.489898	3.583226
Mean + 2 STD	17.2443	15.13549	34	4.923551	57.65802	33.10949	208.9643	179.2066	70.07457	192.0049	36.26945	11.3798	19.94423



AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

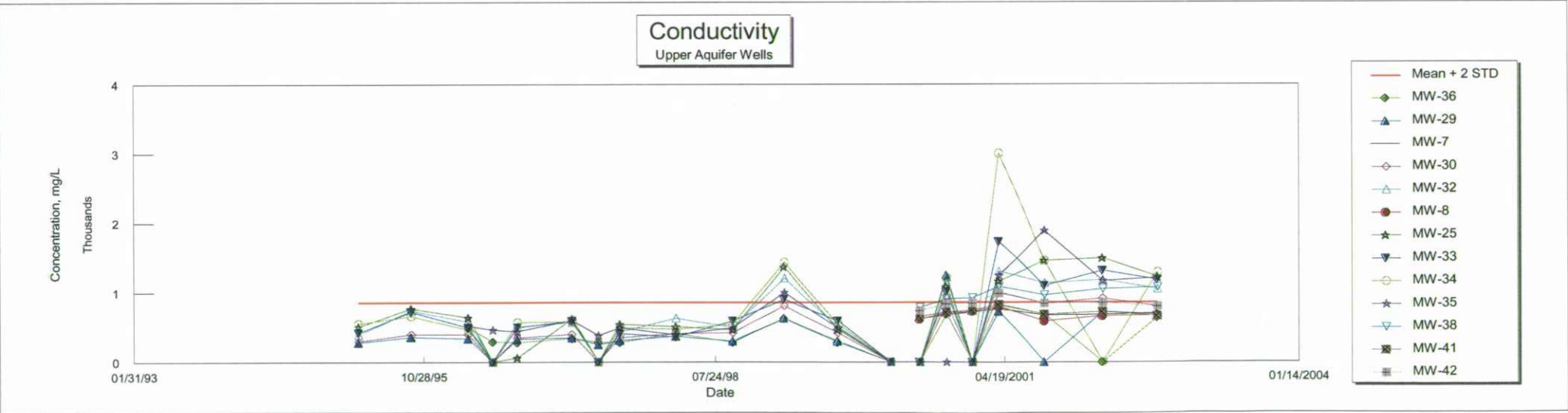
DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD AW	AQUIFER WELLS												
				U.A.W MW36	D.A.W MW 7	D.A.W MW 8	D.A.W MW 29	D.A.W MW 30	D.A.W MW 32	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.A.W MW 38	D.A.W MW 41	D.A.W MW 42
	mg/L															
04/23/91	Chromium, dissolved	0.1	0.03				<0.03	<0.03	<0.03	<0.03	---	<0.03				
10/15/91	Chromium, dissolved	0.1	0.03				<0.03	<0.03	<0.03	<0.03	---	<0.03				
01/23/92	Chromium, dissolved	0.1	0.03				---	<0.03	<0.03	<0.03	<0.03	<0.03				
03/23/92	Chromium, dissolved	0.1	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03				
09/30/92	Chromium, dissolved	0.1	0.03				NT	NT	NT	NT	NT	NT				
03/05/93	Chromium, dissolved	0.1	0.03				NT	NT	NT	NT	NT	NT				
09/21/93	Chromium, dissolved	0.1	0.03				NT	NT	NT	NT	NT	NT				
03/23/94	Chromium, dissolved	0.1	0.03				NT	NT	NT	NT	NT	NT				
09/16/94	Chromium, dissolved	0.1	0.03				NT	NT	NT	NT	NT	NT				
03/16/95	Chromium, dissolved	0.1	0.03				NT	NT	NT	NT	NT	NT				
09/13/95	Chromium, dissolved	0.1	0.03				NT	NT	NT	NT	NT	NT				
03/28/96	Chromium, dissolved	0.1	0.03	<0.03			NT	NT	NT	NT	NT	NT	<0.03			
06/20/96	Chromium, dissolved	0.1	0.03	<0.03			NT	NT	NT	NT	NT	NT	<0.03			
09/13/96	Chromium, dissolved	0.1	0.03	<0.03			NT	NT	NT	NT	NT	NT	<0.03			
03/19/97	Chromium, dissolved	0.1	0.03	NT			NT	NT	NT	NT	NT	NT	NT			
06/18/97	Chromium, dissolved	0.1	0.03	<0.03			<0.03	NT	NT	NT	NT	NT	<0.03			
08/30/97	Chromium, dissolved	0.1	0.03	NT			NT	NT	NT	NT	NT	NT	NT			
03/10/98	Chromium, dissolved	0.1	0.03	NT			NT	NT	NT	NT	NT	NT	NT			
09/21/98	Chromium, dissolved	0.1	0.03	NT			NT	NT	NT	NT	NT	NT	NT			
03/18/99	Chromium, dissolved	0.1	0.03	NT			NT	NT	NT	NT	NT	NT	NT			
09/21/99	Chromium, dissolved	0.1	0.03	NT			NT	NT	NT	NT	NT	NT	NT			
03/21/2000	Chromium, dissolved	0.1	0.03	NT			NT	NT	NT	NT	NT	NT	NT			
06/28/2000	Chromium, dissolved	0.1	0.03	NT	<0.03	<0.03	NT	NT	NT	NT	NT	NT	NT	<0.03	<0.03	<0.03
09/28/2000	Chromium, dissolved	0.1	0.03	NT	<0.03	<0.03	<0.03	NT	NT	NT	NT	NT	DRY	<0.03	<0.03	<0.03
12/27/2000	Chromium, dissolved	0.1	0.03	NT	<0.03	<0.03	NT	NT	NT	NT	NT	NT	NT	<0.03	<0.03	<0.03
03/28/2001	Chromium, dissolved	0.1	0.03	NT	<0.03	<0.03	<0.03	NT	NT	NT	NT	NT	NT	<0.03	<0.03	<0.03
09/02/2001	Chromium, dissolved	0.1	0.03	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/19/2002	Chromium, dissolved	0.1	0.03	NT	NT	NT	<0.005	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/19/2002	Chromium, dissolved	0.1	0.03	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/14/2003	Chromium, dissolved	0.1	0.03	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/29/2003	Chromium, dissolved	0.1	0.03	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/08/2004	Chromium, dissolved	0.1	0.03	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/27/2004	Chromium, dissolved	0.1	0.03	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Mean			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Standard Deviation (STD)			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Mean + 2 STD			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD AW	AQUIFER WELLS												
				U.A.W MW36	D.A.W MW 7	D.A.W MW 8	D.A.W MW 29	D.A.W MW 30	D.A.W MW 32	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.A.W MW 38	D.A.W MW 41	D.A.W MW 42
03/16/95	Conductivity, mv	--	861.2347				280	300	390	510	420	550				
09/13/95	Conductivity, mv	--	861.2347				360	400	740	770	720	660				
03/28/96	Conductivity, mv	--	861.2347	490			340	400	580	640	500	460	520			
06/20/96	Conductivity, mv	--	861.2347	290			NT	NT	NT	NT	NT	NT	460			
09/13/96	Conductivity, mv	--	861.2347	280			330	350	510	60	500	570	440			
03/19/97	Conductivity, mv	--	861.2347	340			350	400	570	620	590	580	600			
06/18/97	Conductivity, mv	--	861.2347	280			250	NT	NT	NT	NT	NT	380			
08/30/97	Conductivity, mv	--	861.2347	280			310	350	430	540	410	490	490			
03/10/98	Conductivity, mv	--	861.2347	410			370	410	630	510	360	470	390			
09/21/98	Conductivity, mv	--	861.2347	280			300	420	500	460	590	540	490			
03/18/99	Conductivity, mv	--	861.2347	625			628	812	1208	1370	902	1438	1005			
09/21/99	Conductivity, mv	--	861.2347	280			300	420	500	460	590	540	490			
03/21/2000	Conductivity, mv	--	861.2347	NT			NT	NT	NT	NT	NT	NT	NT			
06/28/2000	Conductivity, mv	--	861.2347	NT	621	617	NT	NT	NT	NT	NT	NT	NT	782	656	737
09/28/2000	Conductivity, mv	--	861.2347	688	680	700	1245	857	1218	1083	1009	1209	DRY	909	716	837
12/27/2000	Conductivity, mv	--	861.2347	NT	717	728	NT	NT	NT	NT	NT	NT	NT	923	744	848
03/28/2001	Conductivity, mv	--	861.2347	812	764	794	725	1000	1304	1161	1730	3000	1246	1080	826	986
09/02/2001	Conductivity, mv	--	861.2347	687	674	586	NT	845	1137	1455	1098	1455	1889	960	681	844
03/19/2002	Conductivity, mv	--	861.2347	NT	684	663	724	914	1180	1490	1313	NT	1167	1048	722	854
09/19/2002	Conductivity, mv	--	861.2347	640	703	673	686	805	1050	1225	1182	1287	1209	1074	665	800
03/14/2003	Conductivity, mv	--	861.2347	499	731	710	658	795	1056	833	732	1020	709	944	614	798
09/29/2003	Conductivity, mv	--	861.2347	584	606	593	615	724	886	1241	890	1055	886	844	588	708
03/08/2004	Conductivity, mv	--	861.2347	646	704	709	787	886	1256	1360	1154	1237	1124	1142	764	820
09/27/2004	Conductivity, mv	--	861.2347	750	822	774	760	848	1216	1546	1300	1218	995	1264	790	890

Mean	492.2778	700.5455	686.0909	527.2632	628.2105	861.1053	912.3158	841.5789	987.7222	805	997.2727	706	829.2727
Standard Deviation (STD)	184.4785	57.73035	65.07402	253.5373	239.4203	324.5688	430.4566	368.5587	603.9005	400.2402	133.0633	69.94413	70.47384
Mean + 2 STD	861.2347	816.0062	816.2389	1034.338	1107.051	1510.243	1773.229	1578.696	2195.523	1605.48	1263.399	845.8883	970.2204



AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

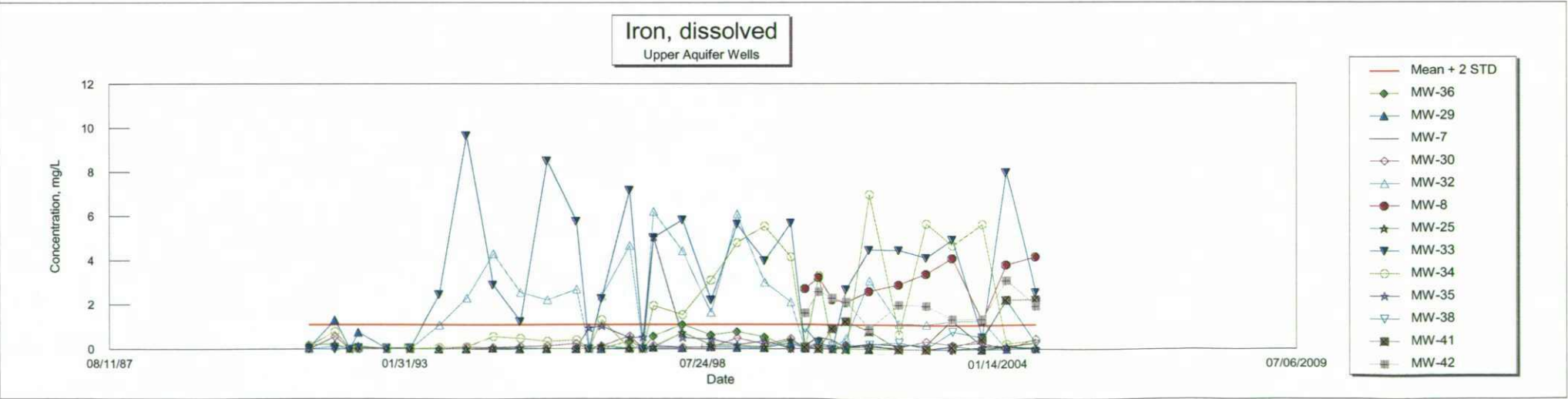
DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD AW	AQUIFER WELLS												
				U.A.W MW36	D.A.W MW 7	D.A.W MW 8	D.A.W MW 29	D.A.W MW 30	D.A.W MW 32	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.A.W MW 38	D.A.W MW 41	D.A.W MW 42
	mg/L															
04/23/91	Copper, dissolved	1.3	0.03				<0.03	<0.03	<0.03	<0.03	---	<0.03				
10/15/91	Copper, dissolved	1.3	0.03				<0.03	<0.03	<0.03	<0.03	---	<0.03				
01/23/92	Copper, dissolved	1.3	0.03				---	<0.03	<0.03	<0.03	<0.03	<0.03				
03/23/92	Copper, dissolved	1.3	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03				
09/30/92	Copper, dissolved	1.3	0.03				NT	NT	NT	NT	NT	NT				
03/05/93	Copper, dissolved	1.3	0.03				NT	NT	NT	NT	NT	NT				
09/21/93	Copper, dissolved	1.3	0.03				NT	NT	NT	NT	NT	NT				
03/23/94	Copper, dissolved	1.3	0.03				NT	NT	NT	NT	NT	NT				
09/16/94	Copper, dissolved	1.3	0.03				NT	NT	NT	NT	NT	NT				
03/16/95	Copper, dissolved	1.3	0.03				NT	NT	NT	NT	NT	NT				
09/13/95	Copper, dissolved	1.3	0.03				NT	NT	NT	NT	NT	NT				
03/28/96	Copper, dissolved	1.3	0.03	<0.03			NT	NT	NT	NT	NT	NT	<0.03			
06/20/96	Copper, dissolved	1.3	0.03	<0.03			NT	NT	NT	NT	NT	NT	<0.03			
09/13/96	Copper, dissolved	1.3	0.03	<0.03			NT	NT	NT	NT	NT	NT	<0.03			
03/19/97	Copper, dissolved	1.3	0.03	NT			NT	NT	NT	NT	NT	NT	NT			
06/18/97	Copper, dissolved	1.3	0.03	<0.03			<0.03	NT	NT	NT	NT	NT	<0.03			
08/30/97	Copper, dissolved	1.3	0.03	NT			NT	NT	NT	NT	NT	NT	NT			
03/10/98	Copper, dissolved	1.3	0.03	NT			NT	NT	NT	NT	NT	NT	NT			
09/21/98	Copper, dissolved	1.3	0.03	NT			NT	NT	NT	NT	NT	NT	NT			
03/18/99	Copper, dissolved	1.3	0.03	NT			NT	NT	NT	NT	NT	NT	NT			
09/21/99	Copper, dissolved	1.3	0.03	NT			NT	NT	NT	NT	NT	NT	NT			
03/21/2000	Copper, dissolved	1.3	0.03	NT			NT	NT	NT	NT	NT	NT	NT			
06/28/2000	Copper, dissolved	1.3	0.03	NT	<0.03	<0.03	NT	NT	NT	NT	NT	NT	NT	<0.03	<0.03	<0.03
09/28/2000	Copper, dissolved	1.3	0.03	NT	<0.03	<0.03	<0.03	NT	NT	NT	NT	NT	DRY	<0.03	<0.03	<0.03
12/27/2000	Copper, dissolved	1.3	0.03	NT	<0.03	<0.03	NT	NT	NT	NT	NT	NT	NT	<0.03	0.03	0.03
03/28/2001	Copper, dissolved	1.3	0.03	NT	<0.03	<0.03	NT	NT	NT	NT	NT	NT	NT	<0.03	<0.03	<0.03
09/02/2001	Copper, dissolved	1.3	0.03	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/19/2002	Copper, dissolved	1.3	0.03	NT	NT	NT	<0.005	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/19/2002	Copper, dissolved	1.3	0.03	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/14/2003	Copper, dissolved	1.3	0.03	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/29/2003	Copper, dissolved	1.3	0.03	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/08/2004	Copper, dissolved	1.3	0.03	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/27/2004	Copper, dissolved	1.3	0.03	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Mean			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Standard Deviation (STD)			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Mean + 2 STD			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD AW	AQUIFER WELLS												
				U.A.W MW36	D.A.W MW 7	D.A.W MW 8	D.A.W MW 29	D.A.W MW 30	D.A.W MW 32	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.A.W MW 38	D.A.W MW 41	D.A.W MW 42
04/23/91	Iron, dissolved	--	1.100624				0.05	<0.03	<0.09	0.177	---	0.133				
10/15/91	Iron, dissolved	--	1.100624				1.3	0.546	0.116	0.205	---	0.767				
01/23/92	Iron, dissolved	--	1.100624				---	<0.03	<0.03	<0.03	<0.03	<0.03				
03/23/92	Iron, dissolved	--	1.100624				0.743	<0.03	0.048	0.121	0.052	<0.03				
09/30/92	Iron, dissolved	--	1.100624				<0.03	<0.03	<0.03	<0.03	0.033	0.043				
03/05/93	Iron, dissolved	--	1.100624				---	<0.03	<0.03	<0.03	0.035	<0.03				
09/21/93	Iron, dissolved	--	1.100624				<0.03	<0.03	1.07	<0.03	2.46	0.05				
03/23/94	Iron, dissolved	--	1.100624				<0.03	0.072	2.29	<0.03	9.65	0.084				
09/16/94	Iron, dissolved	--	1.100624				0.037	0.059	4.3	0.05	2.9	0.55				
03/16/95	Iron, dissolved	--	1.100624				<0.03	0.111	2.55	0.038	1.24	0.47				
09/13/95	Iron, dissolved	--	1.100624				<0.03	0.131	2.2	<0.03	8.5	0.317				
03/28/96	Iron, dissolved	--	1.100624	<0.03			<0.03	0.228	2.68	<0.03	5.77	0.386	0.067			
06/20/96	Iron, dissolved	--	1.100624	<0.03			NT	NT	NT	NT	NT	NT	0.927			
09/13/96	Iron, dissolved	--	1.100624	<0.03			<0.03	0.112	2.37	0.134	2.27	1.3	1.02			
03/19/97	Iron, dissolved	--	1.100624	0.329			0.032	0.573	4.65	<0.03	7.18	<0.03	0.484			
06/18/97	Iron, dissolved	--	1.100624	<0.03			0.086	NT	NT	NT	NT	NT	0.523			
08/30/97	Iron, dissolved	--	1.100624	0.559			0.064	0.144	6.19	0.076	5.02	1.93	5.05			
03/10/98	Iron, dissolved	--	1.100624	1.09			0.041	0.057	4.41	0.717	5.83	1.52	0.5			
09/21/98	Iron, dissolved	--	1.100624	0.61			0.085	0.059	1.63	0.166	2.2	3.09	0.415			
03/18/99	Iron, dissolved	--	1.100624	0.767			0.052	0.48	6.08	0.131	5.64	4.78	0.162			
09/21/99	Iron, dissolved	--	1.100624	0.519			0.043	0.197	2.99	0.076	3.99	5.53	0.337			
03/21/2000	Iron, dissolved	--	1.100624	NT			0.252	0.447	2.1	0.371	5.69	4.15	NT			
06/28/2000	Iron, dissolved	--	1.100624	NT	0.146	2.71	NT	NT	NT	NT	NT	NT	NT	0.904	0.073	1.61
09/28/2000	Iron, dissolved	--	1.100624	<0.03	0.533	3.23	0.031	0.175	0.035	<0.03	0.303	3.3	DRY	0.198	<0.03	2.58
12/27/2000	Iron, dissolved	--	1.100624	NT	0.412	2.22	NT	NT	NT	NT	NT	NT	NT	0.138	0.909	2.3
03/28/2001	Iron, dissolved	--	1.100624	0.196	0.094	2.1	<0.03	0.08	0.493	<0.03	2.7	<0.03	0.108	0.049	1.24	2.12
09/02/2001	Iron, dissolved	--	1.100624	0.103	0.244	2.6	<0.03	0.088	3.07	<0.03	4.47	6.97	0.168	0.197	0.783	0.923
03/19/2002	Iron, dissolved	--	1.100624	<0.03	0.178	2.91	<0.03	0.074	1.14	<0.03	4.46	0.654	<0.03	0.292	<0.03	1.99
09/19/2002	Iron, dissolved	--	1.100624	<0.03	0.184	3.4	<0.03	0.351	1.11	<0.03	4.12	5.65	<0.03	0.041	<0.03	1.96
03/14/2003	Iron, dissolved	--	1.100624	<0.03	1.31	4.11	0.153	0.192	1.26	<0.03	4.95	4.67	<0.03	0.795	0.103	1.37
09/29/2003	Iron, dissolved	--	1.100624	<0.030	0.178	1.28	<0.030	0.296	1.29	<0.030	0.556	5.63	0.078	0.536	0.45	1.37
03/08/2004	Iron, dissolved	--	1.100624	0.073	0.128	3.82	<0.03	<0.03	<0.03	0.121	7.99	0.231	0.109	2.19	2.23	3.1
09/27/2004	Iron, dissolved	--	1.100624	<0.030	0.267	4.16	0.034	0.454	<0.030	0.034	2.56	0.39	<0.030	0.229	2.23	1.94

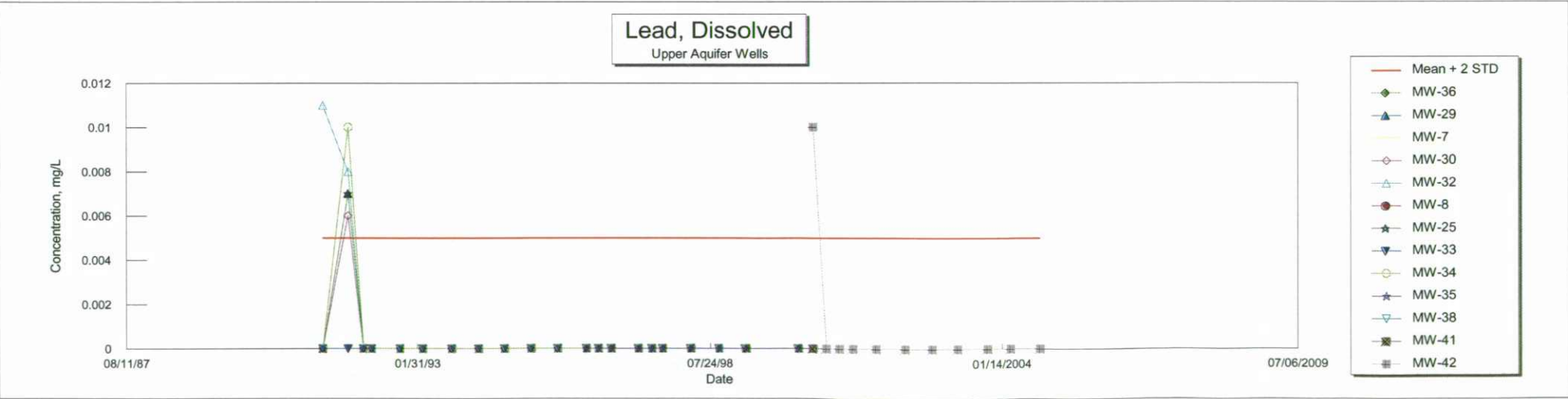
Mean	0.471778	0.334	2.958182	0.2002	0.223909	2.350957	0.172643	3.868038	2.191458	0.710571	0.506273	1.00225	1.933
Standard Deviation (STD)	0.314423	0.332675	0.856672	0.342513	0.168775	1.741168	0.172464	2.674231	2.232227	1.238248	0.599397	0.79884	0.580951
Mean + 2 STD	1.100624	0.999351	4.671527	0.885225	0.561459	5.833292	0.517571	9.216501	6.655912	3.187068	1.705067	2.599931	3.094903



AMES-STORY ENVIRONMENTAL LANDFILL
MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER mg/L	ACTION LEVEL	MEAN + 2 STD AW	AQUIFER WELLS												
				U.A.W MW36	D.A.W MW 7	D.A.W MW 8	D.A.W MW 29	D.A.W MW 30	D.A.W MW 32	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.A.W MW 38	D.A.W MW 41	D.A.W MW 42
04/23/91	Lead, dissolved	0.015	0.005				<0.005	<0.005	0.011	<0.005	---	<0.005				
10/15/91	Lead, dissolved	0.015	0.005				0.007	0.006	0.008	0.007	---	0.01				
01/23/92	Lead, dissolved	0.015	0.005				---	<0.005	<0.005	<0.005	<0.005	<0.005				
03/23/92	Lead, dissolved	0.015	0.005				<0.005	<0.005	<0.005	<0.005	<0.005	<0.005				
09/30/92	Lead, dissolved	0.015	0.005				NT	NT	NT	NT	NT	NT				
03/05/93	Lead, dissolved	0.015	0.005				NT	NT	NT	NT	NT	NT				
09/21/93	Lead, dissolved	0.015	0.005				NT	NT	NT	NT	NT	NT				
03/23/94	Lead, dissolved	0.015	0.005				NT	NT	NT	NT	NT	NT				
09/16/94	Lead, dissolved	0.015	0.005				NT	NT	NT	NT	NT	NT				
03/16/95	Lead, dissolved	0.015	0.005				NT	NT	NT	NT	NT	NT				
09/13/95	Lead, dissolved	0.015	0.005				NT	NT	NT	NT	NT	NT				
03/28/96	Lead, dissolved	0.015	0.005	<0.005			NT	NT	NT	NT	NT	NT	<0.005			
06/20/96	Lead, dissolved	0.015	0.005	<0.005			NT	NT	NT	NT	NT	NT	<0.005			
09/13/96	Lead, dissolved	0.015	0.005	<0.005			NT	NT	NT	NT	NT	NT	<0.005			
03/19/97	Lead, dissolved	0.015	0.005	NT			NT	NT	NT	NT	NT	NT	NT			
06/18/97	Lead, dissolved	0.015	0.005	<0.005			<0.005	NT	NT	NT	NT	NT	<0.005			
08/30/97	Lead, dissolved	0.015	0.005	NT			NT	NT	NT	NT	NT	NT	NT			
03/10/98	Lead, dissolved	0.015	0.005	NT			NT	NT	NT	NT	NT	NT	NT			
09/21/98	Lead, dissolved	0.015	0.005	NT			NT	NT	NT	NT	NT	NT	NT			
03/18/99	Lead, dissolved	0.015	0.005	NT			NT	NT	NT	NT	NT	NT	NT			
03/21/99	Lead, dissolved	0.015	0.005	NT			NT	NT	NT	NT	NT	NT	NT			
03/21/2000	Lead, dissolved	0.015	0.005	NT			NT	NT	NT	NT	NT	NT	NT			
06/28/2000	Lead, dissolved	0.015	0.005	NT	<0.005	<0.005	NT	NT	NT	NT	NT	NT	NT	<0.005	<0.005	0.01
09/28/2000	Lead, dissolved	0.015	0.005	NT	<0.005	<0.005	<0.005	NT	NT	NT	NT	NT	DRY	<0.005	<0.005	<0.005
12/27/2000	Lead, dissolved	0.015	0.005	NT	<0.005	<0.005	NT	NT	NT	NT	NT	NT	NT	<0.005	<0.005	<0.005
03/28/2001	Lead, dissolved	0.015	0.005	NT	<0.005	<0.005	<0.005	NT	NT	NT	NT	NT	NT	<0.005	<0.005	<0.005
09/02/2001	Lead, dissolved	0.015	0.005	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/19/2002	Lead, dissolved	0.015	0.005	NT	NT	NT	<0.005	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/19/2002	Lead, dissolved	0.015	0.005	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/14/2003	Lead, dissolved	0.015	0.005	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/29/2003	Lead, dissolved	0.015	0.005	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/08/2004	Lead, dissolved	0.015	0.005	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/27/2004	Lead, dissolved	0.015	0.005	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

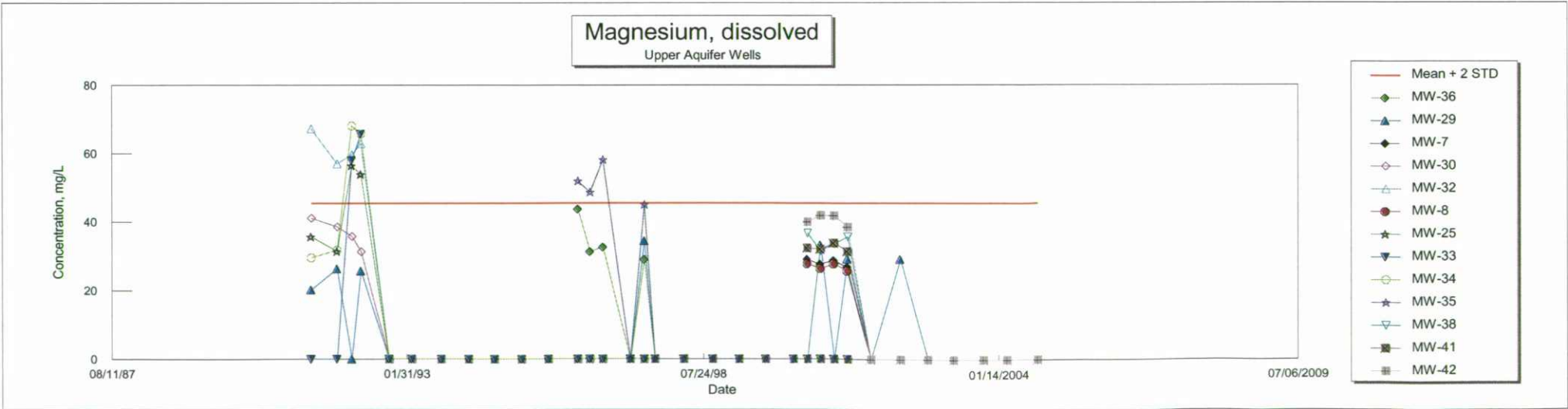
Mean	ERR	ERR	ERR	0.007	0.006	0.0095	0.007	ERR	0.01	ERR	ERR	ERR	0.01
Standard Deviation (STD)	ERR	ERR	ERR	0	0	0.0015	0	ERR	0	ERR	ERR	ERR	0
Mean + 2 STD	ERR	ERR	ERR	0.007	0.006	0.0125	0.007	ERR	0.01	ERR	ERR	ERR	0.01



AMES-STORY ENVIRONMENTAL LANDFILL
MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD AW	AQUIFER WELLS												
				U.A.W MW36	D.A.W MW 7	D.A.W MW 8	D.A.W MW 29	D.A.W MW 30	D.A.W MW 32	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.A.W MW 38	D.A.W MW 41	D.A.W MW 42
04/23/91	Magnesium, dissolved	--	45.47475				20.2	41.1	67.2	35.6	---	29.5				
10/15/91	Magnesium, dissolved	--	45.47475				26.3	38.6	57	31.4	---	31.7				
01/23/92	Magnesium, dissolved	--	45.47475				---	35.8	59.6	56.4	58	68				
03/23/92	Magnesium, dissolved	--	45.47475				25.7	31.3	62.8	53.9	65.7	65.7				
09/30/92	Magnesium, dissolved	--	45.47475				NT	NT	NT	NT	NT	NT				
03/05/93	Magnesium, dissolved	--	45.47475				NT	NT	NT	NT	NT	NT				
09/21/93	Magnesium, dissolved	--	45.47475				NT	NT	NT	NT	NT	NT				
03/23/94	Magnesium, dissolved	--	45.47475				NT	NT	NT	NT	NT	NT				
09/16/94	Magnesium, dissolved	--	45.47475				NT	NT	NT	NT	NT	NT				
03/16/95	Magnesium, dissolved	--	45.47475				NT	NT	NT	NT	NT	NT				
09/13/95	Magnesium, dissolved	--	45.47475				NT	NT	NT	NT	NT	NT				
03/28/96	Magnesium, dissolved	--	45.47475	43.7			NT	NT	NT	NT	NT	NT	51.8			
06/20/96	Magnesium, dissolved	--	45.47475	31.3			NT	NT	NT	NT	NT	NT	48.6			
09/13/96	Magnesium, dissolved	--	45.47475	32.6			NT	NT	NT	NT	NT	NT	58.1			
03/19/97	Magnesium, dissolved	--	45.47475	NT			NT	NT	NT	NT	NT	NT	NT			
06/18/97	Magnesium, dissolved	--	45.47475	29			34.4	NT	NT	NT	NT	NT	45			
08/30/97	Magnesium, dissolved	--	45.47475	NT			NT	NT	NT	NT	NT	NT	NT			
03/10/98	Magnesium, dissolved	--	45.47475	NT			NT	NT	NT	NT	NT	NT	NT			
09/21/98	Magnesium, dissolved	--	45.47475	NT			NT	NT	NT	NT	NT	NT	NT			
03/18/99	Magnesium, dissolved	--	45.47475	NT			NT	NT	NT	NT	NT	NT	NT			
09/21/99	Magnesium, dissolved	--	45.47475	NT			NT	NT	NT	NT	NT	NT	NT			
03/21/2000	Magnesium, dissolved	--	45.47475	NT			NT	NT	NT	NT	NT	NT	NT			
06/28/2000	Magnesium, dissolved	--	45.47475	NT	29.1	27.8	NT	NT	NT	NT	NT	NT	NT	36.7	32.4	40
09/28/2000	Magnesium, dissolved	--	45.47475	NT	27.7	26.4	33.2	NT	NT	NT	NT	NT	DRY	31.6	32	41.9
12/27/2000	Magnesium, dissolved	--	45.47475	NT	28.8	27.8	NT	NT	NT	NT	NT	NT	NT	33.6	33.8	41.8
03/28/2001	Magnesium, dissolved	--	45.47475	NT	26.9	25.7	29.2	NT	NT	NT	NT	NT	NT	35.6	31.4	38.5
09/02/2001	Magnesium, dissolved	--	45.47475	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/19/2002	Magnesium, dissolved	--	45.47475	NT	NT	NT	29.1	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/19/2002	Magnesium, dissolved	--	45.47475	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/14/2003	Magnesium, dissolved	--	45.47475	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/29/2003	Magnesium, dissolved	--	45.47475	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/08/2004	Magnesium, dissolved	--	45.47475	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/27/2004	Magnesium, dissolved	--	45.47475	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

Mean	34.15	28.125	26.925	28.3	36.7	61.65	44.325	61.85	48.725	50.875	34.375	32.4	40.55
Standard Deviation (STD)	5.662376	0.878564	0.909327	4.456777	3.637994	3.806245	10.96207	3.85	18.1599	4.815275	1.94984	0.883176	1.404457
Mean + 2 STD	45.47475	29.88213	28.74365	37.21355	43.97599	69.26249	66.24913	69.55	85.04479	60.50555	38.27468	34.16635	43.35891



AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

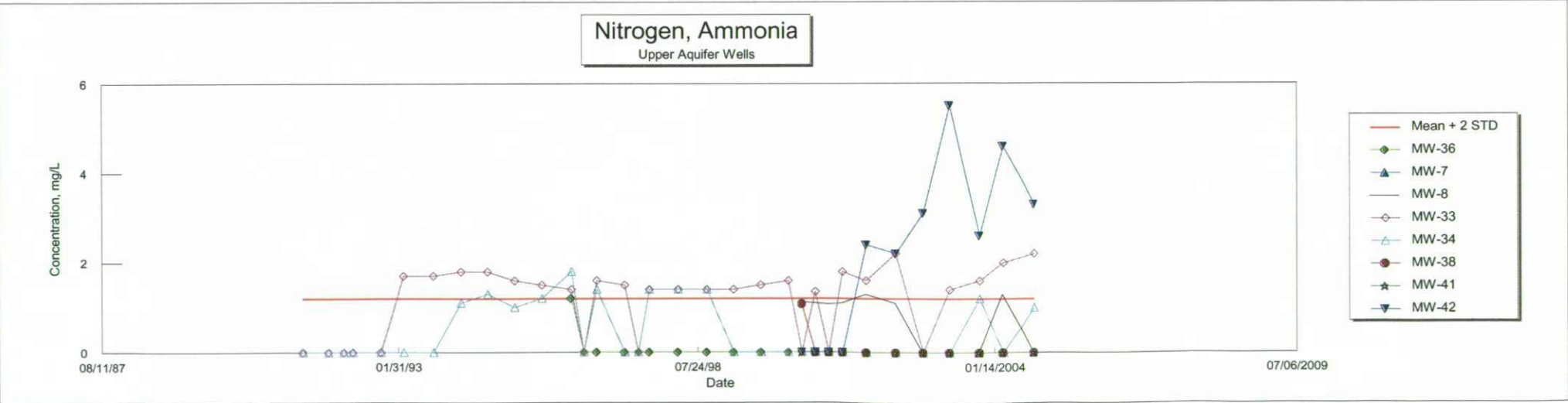
DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD AW	AQUIFER WELLS												
				U.A.W MW36	D.A.W MW 7	D.A.W MW 8	D.A.W MW 29	D.A.W MW 30	D.A.W MW 32	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.A.W MW 38	D.A.W MW 41	D.A.W MW 42
04/23/91	Mercury, dissolved	0.002	0.0005				<0.001	<0.001	<0.001	<0.001	---	<0.001				
10/15/91	Mercury, dissolved	0.002	0.0005				<0.0005	<0.0005	<0.0005	<0.0005	---	<0.0005				
01/23/92	Mercury, dissolved	0.002	0.0005				---	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005				
03/23/92	Mercury, dissolved	0.002	0.0005				<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005				
09/30/92	Mercury, dissolved	0.002	0.0005				NT	NT	NT	NT	NT	NT				
03/05/93	Mercury, dissolved	0.002	0.0005				NT	NT	NT	NT	NT	NT				
09/21/93	Mercury, dissolved	0.002	0.0005				NT	NT	NT	NT	NT	NT				
03/23/94	Mercury, dissolved	0.002	0.0005				NT	NT	NT	NT	NT	NT				
09/16/94	Mercury, dissolved	0.002	0.0005				NT	NT	NT	NT	NT	NT				
03/16/95	Mercury, dissolved	0.002	0.0005				NT	NT	NT	NT	NT	NT				
09/13/95	Mercury, dissolved	0.002	0.0005				NT	NT	NT	NT	NT	NT				
03/28/96	Mercury, dissolved	0.002	0.0005	<0.0005			NT	NT	NT	NT	NT	NT	<0.0005			
06/20/96	Mercury, dissolved	0.002	0.0005	<0.0005			NT	NT	NT	NT	NT	NT	<0.0005			
09/13/96	Mercury, dissolved	0.002	0.0005	<0.005			NT	NT	NT	NT	NT	NT	<0.0005			
03/19/97	Mercury, dissolved	0.002	0.0005	NT			NT	NT	NT	NT	NT	NT	NT			
06/18/97	Mercury, dissolved	0.002	0.0005	<0.0005			<0.0005	NT	NT	NT	NT	NT	<0.0005			
08/30/97	Mercury, dissolved	0.002	0.0005	NT			NT	NT	NT	NT	NT	NT	NT			
03/10/98	Mercury, dissolved	0.002	0.0005	NT			NT	NT	NT	NT	NT	NT	NT			
09/21/98	Mercury, dissolved	0.002	0.0005	NT			NT	NT	NT	NT	NT	NT	NT			
03/18/99	Mercury, dissolved	0.002	0.0005	NT			NT	NT	NT	NT	NT	NT	NT			
09/21/99	Mercury, dissolved	0.002	0.0005	NT			NT	NT	NT	NT	NT	NT	NT			
03/28/2000	Mercury, dissolved	0.002	0.0005	NT			NT	NT	NT	NT	NT	NT	NT			
06/28/2000	Mercury, dissolved	0.002	0.0005	NT	<0.0005	<0.0005	NT	NT	NT	NT	NT	NT	NT	<0.0005	<0.0005	<0.0005
09/28/2000	Mercury, dissolved	0.002	0.0005	NT	<0.0005	<0.0005	<0.0005	NT	NT	NT	NT	NT	DRY	<0.0005	<0.0005	<0.0005
12/27/2000	Mercury, dissolved	0.002	0.0005	NT	<0.0005	<0.0005	NT	NT	NT	NT	NT	NT	NT	<0.0005	<0.0005	<0.0005
03/28/2001	Mercury, dissolved	0.002	0.0005	NT	<0.0005	<0.0005	<0.0005	NT	NT	NT	NT	NT	NT	<0.0005	<0.0005	<0.0005
09/02/2001	Mercury, dissolved	0.002	0.0005	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/19/2002	Mercury, dissolved	0.002	0.0005	NT	NT	NT	<0.0005	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/19/2002	Mercury, dissolved	0.002	0.0005	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/14/2003	Mercury, dissolved	0.002	0.0005	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/29/2003	Mercury, dissolved	0.002	0.0005	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/08/2004	Mercury, dissolved	0.002	0.0005	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/27/2004	Mercury, dissolved	0.002	0.0005	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Mean			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Standard Deviation (STD)			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Mean + 2 STD			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD AW	AQUIFER WELLS													
				U.A.W MW36	D.A.W MW 7	D.A.W MW 8	D.A.W MW 29	D.A.W MW 30	D.A.W MW 32	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.A.W MW 38	D.A.W MW 41	D.A.W MW 42	
mg/L																	
04/23/91	Nitrogen, Ammonia	--	1.2				<0.5	<0.5	<0.5	<0.5	---	<0.5					
10/15/91	Nitrogen, Ammonia	--	1.2				<0.5	<0.5	<0.5	<0.5	---	<0.5					
01/23/92	Nitrogen, Ammonia	--	1.2				---	<1.0	<1.0	<1.0	<1.0	<1.0					
03/23/92	Nitrogen, Ammonia	--	1.2				<1.0	<1.0	<1.0	<1.0	<1.0	<1.0					
09/30/92	Nitrogen, Ammonia	--	1.2				<1	<1	<1	<1	<1	<1					
03/05/93	Nitrogen, Ammonia	--	1.2				---	<1	<1	<1	<1	1.7	<1				
09/21/93	Nitrogen, Ammonia	--	1.2				<1	<1	<1	<1	<1	1.7	<1				
03/23/94	Nitrogen, Ammonia	--	1.2				<1	<1	<1	<1	<1	1.8	1.1				
09/16/94	Nitrogen, Ammonia	--	1.2				<1	<1	<1	<1	<1	1.8	1.3				
03/16/95	Nitrogen, Ammonia	--	1.2				<1	<1	<1	<1	<1	1.6	1				
09/13/95	Nitrogen, Ammonia	--	1.2				<1	<1	<1	<1	<1	1.5	1.2				
03/28/96	Nitrogen, Ammonia	--	1.2	1.2			<1	<1	<1	<1	<1	1.4	1.8	<1			
06/20/96	Nitrogen, Ammonia	--	1.2	<1			NT	NT	NT	NT	NT	NT	NT	<1			
09/13/96	Nitrogen, Ammonia	--	1.2	<1			<1	<1	<1	<1	<1	1.6	1.4	<1			
03/19/97	Nitrogen, Ammonia	--	1.2	<1			<1	<1	<1	<1	<1	1.5	<1	<1			
06/18/97	Nitrogen, Ammonia	--	1.2	<1			<1	NT	NT	NT	NT	NT	NT	<1			
08/30/97	Nitrogen, Ammonia	--	1.2	<1			<1	<1	<1	<1	<1	1.4	1.4	<1			
03/10/98	Nitrogen, Ammonia	--	1.2	<1			<1	<1	<1	<1	<1	1.4	1.4	<1			
09/21/98	Nitrogen, Ammonia	--	1.2	<1			<1	<1	<1	<1	<1	1.4	1.4	<1			
03/18/99	Nitrogen, Ammonia	--	1.2	<1			<1	<1	<1	<1	<1	1.4	<1	<1			
09/21/99	Nitrogen, Ammonia	--	1.2	<1			<1	<1	<1	<1	<1	1.5	<1	<1			
03/21/2000	Nitrogen, Ammonia	--	1.2	NT			<1	<1	<1	<1	<1	1.6	<1	NT			
06/28/2000	Nitrogen, Ammonia	--	1.2	NT	<1	1.13	NT	NT	NT	NT	NT	NT	NT	NT	1.08	<1	<1
09/28/2000	Nitrogen, Ammonia	--	1.2	<1	<1	1.1	<1	<1	<1	<1	<1	1.35	<1	DRY	<1	<1	<1
12/27/2000	Nitrogen, Ammonia	--	1.2	NT	<1	1.08	NT	NT	NT	NT	NT	NT	NT	NT	<1	<1	<1
03/28/2001	Nitrogen, Ammonia	--	1.2	<1	<1	1.1	<1	<1	<1	<1	<1	1.8	<1	<1	<1	<1	<1
09/02/2001	Nitrogen, Ammonia	--	1.2	<1	<1	1.3	<1	<1	<1	<1	<1	1.6	<1	<1	<1	<1	<1
03/19/2002	Nitrogen, Ammonia	--	1.2	<1	<1	1.1	<1	<1	<1	<1	<1	2.2	<1	<1	<1	<1	<1
09/19/2002	Nitrogen, Ammonia	--	1.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
03/14/2003	Nitrogen, Ammonia	--	1.2	<1	<1	<1	<1	<1	<1	1.1	<1	1.4	<1	<1	<1	<1	<1
09/29/2003	Nitrogen, Ammonia	--	1.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.6	1.2	<1.0	<1.0	<1.0	<1
03/08/2004	Nitrogen, Ammonia	--	1.2	<1.0	<1.0	1.3	<1.0	<1.0	<1.0	<1.0	<1.0	2	<1.0	<1.0	<1.0	<1.0	<1
09/27/2004	Nitrogen, Ammonia	--	1.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.2	1	<1.0	<1.0	<1.0	<1.0

Mean	1.2	ERR	1.158571	ERR	ERR	1.1	ERR	1.628261	1.290909	ERR	1.08	ERR	ERR
Standard Deviation (STD)	0	ERR	0.090464	ERR	ERR	0	ERR	0.240844	0.219315	ERR	0	ERR	ERR
Mean + 2 STD	1.2	ERR	1.339499	ERR	ERR	1.1	ERR	2.109948	1.72954	ERR	1.08	ERR	ERR

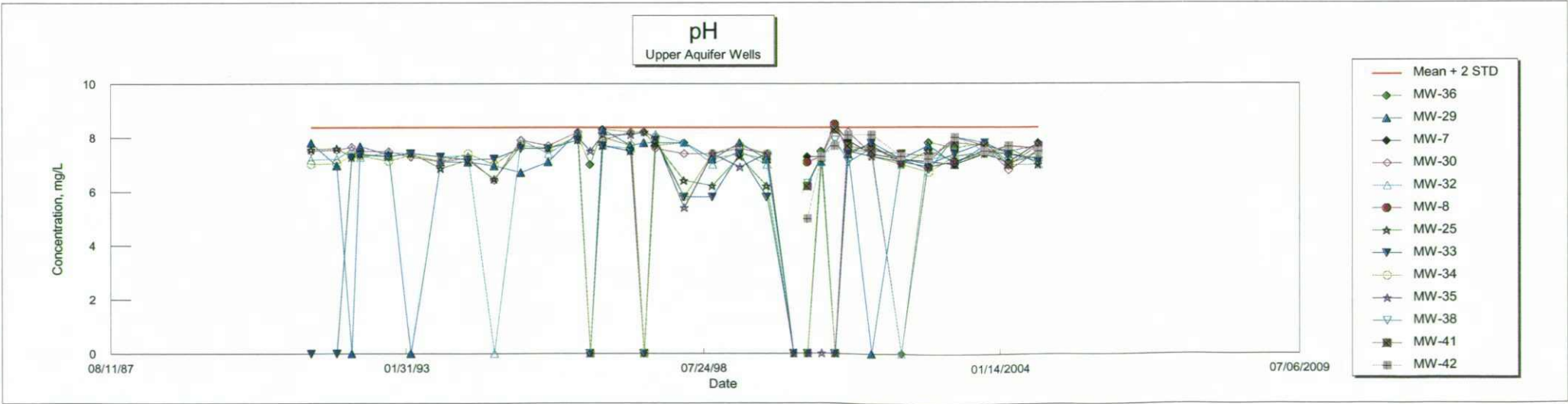


AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD AW	AQUIFER WELLS												
				U.A.W MW36	D.A.W MW 7	D.A.W MW 8	D.A.W MW 29	D.A.W MW 30	D.A.W MW 32	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.A.W MW 38	D.A.W MW 41	D.A.W MW 42
04/23/91	pH	--	8.383962				7.80	7.51	7.18	7.55	---	7.01				
10/15/91	pH	--	8.383962				6.96	7.54	7.21	7.60	---	7.03				
01/23/92	pH	--	8.383962				---	7.65	7.58	7.27	7.26	7.31				
03/23/92	pH	--	8.383962				7.68	7.50	7.27	7.39	7.37	7.32				
09/30/92	pH	--	8.383962				7.36	7.49	7.44	7.31	7.3	7.13				
03/05/93	pH	--	8.383962				---	7.28	7.41	7.41	7.42	7.34				
09/21/93	pH	--	8.383962				7.1	7.11	7.3	6.85	7.29	7.12				
03/23/94	pH	--	8.383962				7.1	7.24	7.33	7.16	7.18	7.4				
09/16/94	pH	--	8.383962				6.95	6.42		6.46	7.22	6.99				
03/16/95	pH	--	8.383962				6.7	7.9	7.9	7.7	7.6	7.7				
09/13/95	pH	--	8.383962				7.1	7.7	7.4	7.6	7.6	7.6				
03/28/96	pH	--	8.383962	8			8.2	8.2	8.1	7.9	7.9	8	8			
06/20/96	pH	--	8.383962	7			NT	NT	NT	NT	NT	NT	7.5			
09/13/96	pH	--	8.383962	8.3			8.3	7.9	7.7	7.7	7.7	8	8.1			
03/19/97	pH	--	8.383962	8.2			7.7	8.2	7.6	7.5	7.5	7.7	8.1			
06/18/97	pH	--	8.383962	8.2			7.8	NT	NT	NT	NT	NT	8.2			
08/30/97	pH	--	8.383962	7.7			7.8	7.6	8.1	7.8	7.9	8	8			
03/10/98	pH	--	8.383962	7.8			7.8	7.4	7.8	6.4	5.8	5.8	5.4			
09/21/98	pH	--	8.383962	7.2			7.2	7.4	7	6.2	5.8	7.4	7.4			
03/18/99	pH	--	8.383962	7.4			7.8	7.6	7.5	7.3	7.4	7.7	6.9			
09/21/99	pH	--	8.383962	7.2			7.2	7.4	7	6.2	5.8	7.4	7.4			
03/21/2000	pH	--	8.383962	NT			NT	NT	NT	NT	NT	NT	NT			
06/28/2000	pH	--	8.383962	NT	7.3	7.1	NT	NT	NT	NT	NT	NT	NT	6.3	6.2	5
09/28/2000	pH	--	8.383962	7.5	7.3	7.3	7.1	7.3	7.1	7.2	7.3	7.2	NT	7.3	7.3	7.3
12/27/2000	pH	--	8.383962	NT	8.5	8.5	NT	NT	NT	NT	NT	NT	NT	7.9	8.3	7.7
03/28/2001	pH	--	8.383962	7.5	7.9	7.5	7.4	8.2	7.7	7.5	7.4	7.5	7.5	7.1	7.7	8.1
09/02/2001	pH	--	8.383962	7.5	7.4	7.7	NT	7.4	7.5	7.7	7.8	7.3	7.3	7.6	7.5	8.1
03/19/2002	pH	--	8.383962	NT	7.2	7.1	7.2	NT	NT	7	7.2	7	7.1	7.2	7.4	7.3
09/19/2002	pH	--	8.383962	7.8	7.1	6.9	7.7	7.1	7.2	7.5	7	6.7	6.9	6.8	7.3	7.2
03/14/2003	pH	--	8.383962	7.6	7	7.1	7	8	7.3	7.1	7.4	7.3	7.1	8	7.8	8
09/29/2003	pH	--	8.383962	7.8	7.4	7.4	7.7	7.7	7.5	7.4	7.8	7.4	7.5	7.8	7.7	7.5
03/08/2004	pH	--	8.383962	7	7.1	7.7	7.5	6.8	7	7.6	7.4	7.4	7.4	7.1	7	7.7
09/27/2004	pH	--	8.383962	7.5	7.8	7.6	7.7	7.5	7	7	7.1	7.2	7.2	7.3	7.7	7.5

Mean	7.622222	7.454545	7.445455	7.455769	7.52	7.427692	7.260714	7.247692	7.319643	7.388889	7.309091	7.445455	7.4
Standard Deviation (STD)	0.38087	0.425043	0.420743	0.399289	0.399907	0.313201	0.459743	0.571794	0.429106	0.62795	0.479497	0.508766	0.81798
Mean + 2 STD	8.383962	8.304631	8.286941	8.254348	8.319815	8.054094	8.180201	8.391281	8.177855	8.644789	8.268085	8.462987	9.03596



AMES-STORY ENVIRONMENTAL LANDFILL

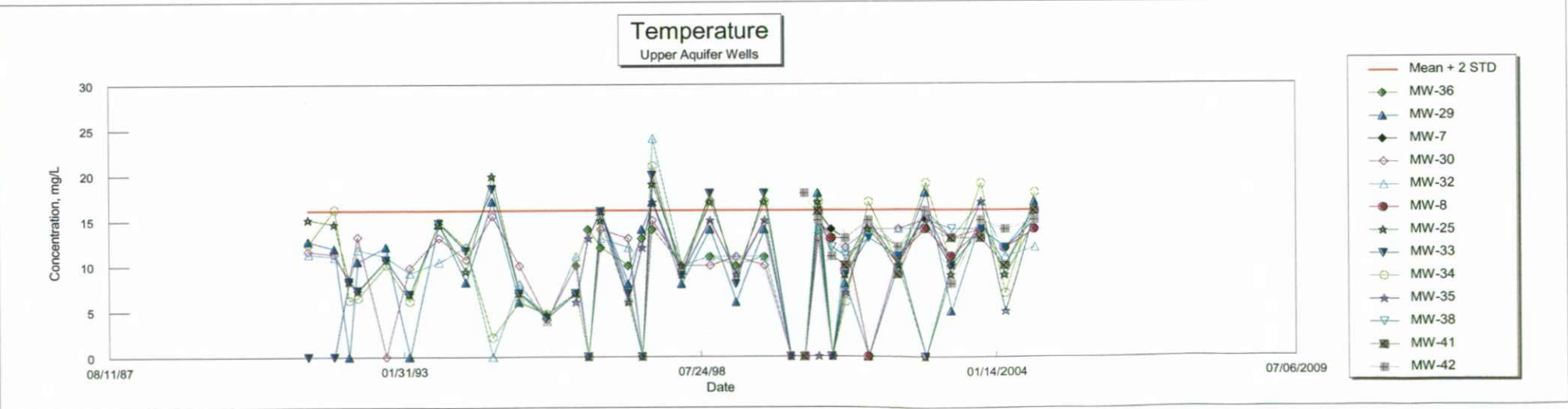
MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD AW	AQUIFER WELLS												
				U.A.W MW36	D.A.W MW 7	D.A.W MW 8	D.A.W MW 29	D.A.W MW 30	D.A.W MW 32	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.A.W MW 38	D.A.W MW 41	D.A.W MW 42
	mg/L															
04/23/91	Phenols	--	0.1				<0.1	<0.1	<0.1	<0.1	---	<0.1				
10/15/91	Phenols	--	0.1				<0.1	0.1	<0.1	<0.1	---	<0.1				
01/23/92	Phenols	--	0.1				---	<0.1	<0.1	<0.1	<0.1	<0.1				
03/23/92	Phenols	--	0.1				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
09/30/92	Phenols	--	0.1				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
03/05/93	Phenols	--	0.1				NT	NT	NT	NT	NT	NT				
09/21/93	Phenols	--	0.1				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
03/23/94	Phenols	--	0.1				NT	NT	NT	NT	NT	NT				
09/16/94	Phenols	--	0.1				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
03/16/95	Phenols	--	0.1				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
09/13/95	Phenols	--	0.1				NT	NT	NT	NT	NT	NT				
03/28/96	Phenols	--	0.1	NT			<0.1	NT	NT	NT	NT	NT	NT			
06/20/96	Phenols	--	0.1	NT			NT	NT	NT	NT	NT	NT	NT			
09/13/96	Phenols	--	0.1	<0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1			
03/19/97	Phenols	--	0.1	NT			NT	NT	NT	NT	NT	NT	NT			
06/18/97	Phenols	--	0.1	NT			NT	NT	NT	NT	NT	NT	NT			
08/30/97	Phenols	--	0.1	<0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1			
03/10/98	Phenols	--	0.1	NT			NT	NT	NT	NT	NT	NT	NT			
09/21/98	Phenols	--	0.1	<0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1			
03/18/99	Phenols	--	0.1	NT			NT	NT	NT	NT	NT	NT	NT			
09/21/99	Phenols	--	0.1	<0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1			
03/21/2000	Phenols	--	0.1	NT			NT	NT	NT	NT	NT	NT	NT			
06/28/2000	Phenols	--	0.1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/28/2000	Phenols	--	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	DRY	<0.1	<0.1	<0.1
12/27/2000	Phenols	--	0.1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/28/2001	Phenols	--	0.1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/02/2001	Phenols	--	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
03/19/2002	Phenols	--	0.1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/19/2002	Phenols	--	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
03/14/2003	Phenols	--	0.1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/29/2003	Phenols	--	0.1	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	NT
03/08/2004	Phenols	--	0.1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/27/2004	Phenols	--	0.1	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
	Mean			ERR	ERR	ERR	ERR	0.1	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Standard Deviation (STD)			ERR	ERR	ERR	ERR	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Mean + 2 STD			ERR	ERR	ERR	ERR	0.1	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

AMES-STORY ENVIRONMENTAL LANDFILL
MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD AW	AQUIFER WELLS												
				U.A.W MW36	D.A.W MW 7	D.A.W MW 8	D.A.W MW 29	D.A.W MW 30	D.A.W MW 32	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.A.W MW 38	D.A.W MW 41	D.A.W MW 42
04/23/91	Temperature, celsius	--	16.10786				12.7	11.6	11.3	15.1	---	12.4				
10/15/91	Temperature, celsius	--	16.10786				11.9	11.3	11.0	14.6	---	16.2				
01/23/92	Temperature, celsius	--	16.10786				---	8.5	8.4	8.3	8.3	6.2				
03/23/92	Temperature, celsius	--	16.10786				10.5	13.2	11.8	7.2	7.3	6.5				
09/30/92	Temperature, celsius	--	16.10786				12.1	11.3	11	10.7	10.7	10.1				
03/05/93	Temperature, celsius	--	16.10786				---	9.8	9.2	6.9	6.9	6.1				
09/21/93	Temperature, celsius	--	16.10786				14.6	13.1	10.4	14.6	14.7	14.8				
03/23/94	Temperature, celsius	--	16.10786				8.2	10.7	12.1	9.4	11.7	12				
09/16/94	Temperature, celsius	--	16.10786				17.1	15.5		19.9	18.5	2.11				
03/16/95	Temperature, celsius	--	16.10786				6	10	8	7	7	6				
09/13/95	Temperature, celsius	--	16.10786				4.62	4.05	3.88	4.63	4.24	4.66				
03/28/96	Temperature, celsius	--	16.10786	10			7	10	11	7	7		6			
06/20/96	Temperature, celsius	--	16.10786	14			NT	NT	NT	NT	NT	NT	13			
09/13/96	Temperature, celsius	--	16.10786	12			16	14	13	15	16	16	16			
03/19/97	Temperature, celsius	--	16.10786	10			8	13	12	6	7	6	6			
06/18/97	Temperature, celsius	--	16.10786	13			14	NT	NT	NT	NT	NT	12			
08/30/97	Temperature, celsius	--	16.10786	14			17	15	24	19	20	21	17			
03/10/98	Temperature, celsius	--	16.10786	10			8	10	10	10	9	9	9			
09/21/98	Temperature, celsius	--	16.10786	11			14	10	11	17	18	17	15			
03/18/99	Temperature, celsius	--	16.10786	10			6	11	11	9	8	9	9			
09/21/99	Temperature, celsius	--	16.10786	11			14	10	11	17	18	17	15			
03/21/2000	Temperature, celsius	--	16.10786	NT			NT	NT	NT	NT	NT	NT	NT			
06/28/2000	Temperature, celsius	--	16.10786	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	18
09/28/2000	Temperature, celsius	--	16.10786	15	16	15	18	13	14	17	16	17	NT	15	16	15
12/27/2000	Temperature, celsius	--	16.10786	NT	14	13	NT	NT	NT	NT	NT	NT	NT	12	11	11
03/28/2001	Temperature, celsius	--	16.10786	10	13	13	8	12	12	9	9	6	7	11	10	13
09/02/2001	Temperature, celsius	--	16.10786	14	NT	NT	NT	14	14	14	13	17	15	13	15	15
03/19/2002	Temperature, celsius	--	16.10786	12	11	11	10	14	14	10	11	10	10	11	9	12
09/19/2002	Temperature, celsius	--	16.10786	14	15	14	18	15	14	NT	NT	19	16	15	16	16
03/14/2003	Temperature, celsius	--	16.10786	13	10	11	5	16	13	9	10	10	10	14	13	8
09/29/2003	Temperature, celsius	--	16.10786	14	14	14	15	14	17	15	14	19	17	14	13	15
03/08/2004	Temperature, celsius	--	16.10786	12	12	12	10	12	11	9	12	7	5	12	10	14
09/27/2004	Temperature, celsius	--	16.10786	16	15	14	17	15	12	15	15	18	16	16	16	15

Mean	12.36842	13.33333	13	11.64308	11.9537	11.89185	11.71593	11.6936	11.5025	11.88889	13.3	12.9	13.81818
Standard Deviation (STD)	1.869718	1.885618	1.333333	4.215914	2.468127	3.352824	4.276846	4.321947	5.304	4.067334	1.676305	2.624881	2.587318
Mean + 2 STD	16.10786	17.10457	15.66667	20.0749	16.88996	18.5975	20.26962	20.33749	22.1105	20.02356	16.65261	18.14976	18.99282

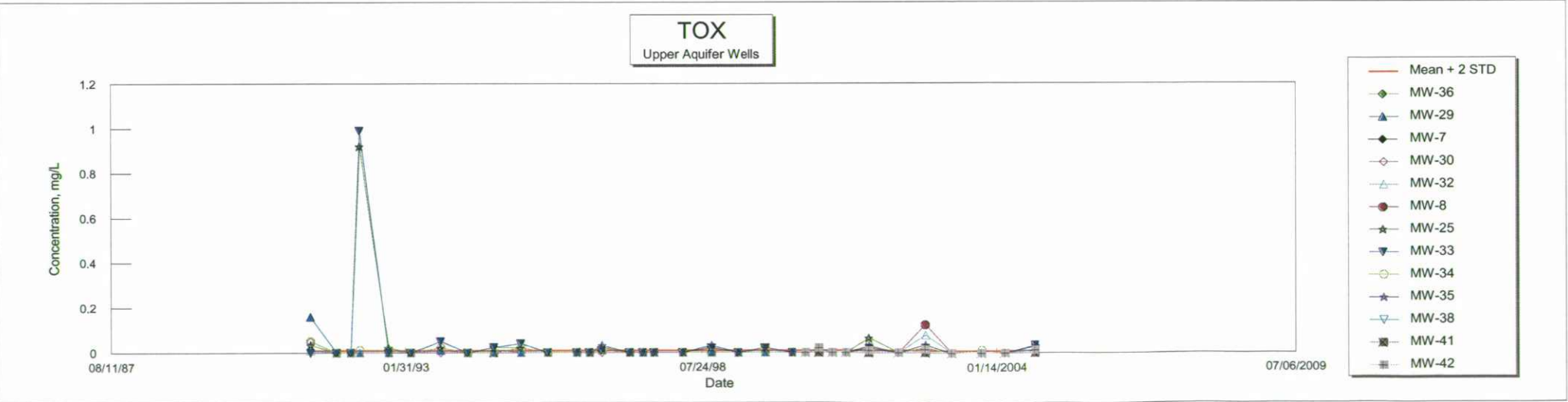


AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD AW	AQUIFER WELLS												
				U.A.W MW36	D.A.W MW 7	D.A.W MW 8	D.A.W MW 29	D.A.W MW 30	D.A.W MW 32	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.A.W MW 38	D.A.W MW 41	D.A.W MW 42
mg/L																
04/23/91	Total Organic Halogens	--	0.01				0.16	0.05	0.01	0.033	---	0.05				
10/15/91	Total Organic Halogens	--	0.01				<0.01	<0.01	<0.01	<0.01	---	<0.01				
01/23/92	Total Organic Halogens	--	0.01				---	<0.01	<0.01	<0.01	<0.01	<0.01				
03/23/92	Total Organic Halogens	--	0.01				<0.01	<0.01	<0.01	0.92	0.99	0.01				
09/30/92	Total Organic Halogens	--	0.01				<0.01	<0.01	<0.01	0.02	<0.01	0.01				
03/05/93	Total Organic Halogens	--	0.01				NT	NT	NT	NT	NT	NT				
09/21/93	Total Organic Halogens	--	0.01				0.01	0.01	0.01	0.02	0.05	0.02				
03/23/94	Total Organic Halogens	--	0.01				NT	NT	NT	NT	NT	NT				
09/16/94	Total Organic Halogens	--	0.01				<0.01	<0.01	0.014	0.024	0.024	<0.01				
03/16/95	Total Organic Halogens	--	0.01				<0.01	<0.01	<0.01	0.02	0.04	0.02				
09/13/95	Total Organic Halogens	--	0.01				NT	NT	NT	NT	NT	NT				
03/28/96	Total Organic Halogens	--	0.01	NT			<0.01	NT	NT	NT	NT	NT	NT			
06/20/96	Total Organic Halogens	--	0.01	NT			NT	NT	NT	NT	NT	NT	NT			
09/13/96	Total Organic Halogens	--	0.01	0.01			0.01	<0.01	0.01	0.02	0.01	0.01	0.03			
03/19/97	Total Organic Halogens	--	0.01	NT			NT	NT	NT	NT	NT	NT	NT			
06/18/97	Total Organic Halogens	--	0.01	NT			NT	NT	NT	NT	NT	NT	NT			
08/30/97	Total Organic Halogens	--	0.01	<0.01			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01			
03/10/98	Total Organic Halogens	--	0.01	NT			NT	NT	NT	NT	NT	NT	NT			
09/21/98	Total Organic Halogens	--	0.01	<0.01			<0.01	<0.01	<0.01	0.02	0.02	<0.01	0.03			
03/18/99	Total Organic Halogens	--	0.01	NT			NT	NT	NT	NT	NT	NT	NT			
09/21/99	Total Organic Halogens	--	0.01	<0.01			<0.01	<0.01	<0.01	0.02	0.02	0.01	0.02			
03/21/2000	Total Organic Halogens	--	0.01	NT			NT	NT	NT	NT	NT	NT	NT			
06/28/2000	Total Organic Halogens	--	0.01	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/28/2000	Total Organic Halogens	--	0.01	<0.01	0.02	0.02	0.02	<0.01	0.01	0.02	0.02	0.02	DRY	<0.01	<0.01	0.02
12/27/2000	Total Organic Halogens	--	0.01	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/28/2001	Total Organic Halogens	--	0.01	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/02/2001	Total Organic Halogens	--	0.01	<0.01	<0.01	<0.01	<0.01	0.013	0.02	0.065	0.021	0.03	0.028	<0.01	<0.01	0.011
03/19/2002	Total Organic Halogens	--	0.01	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/19/2002	Total Organic Halogens	--	0.01	<0.01	<0.01	0.124	<0.01	0.015	0.077	0.019	0.02	0.021	0.034	<0.01	<0.01	0.014
03/14/2003	Total Organic Halogens	--	0.01	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/29/2003	Total Organic Halogens	--	0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.012	<0.010	<0.010	<0.010	NT
03/08/2004	Total Organic Halogens	--	0.01	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/27/2004	Total Organic Halogens	--	0.01	<0.010	0.013	<0.010	0.014	<0.010	0.01	0.034	0.034	0.012	0.029	0.015	<0.010	0.012

Mean	0.01	0.0165	0.072	0.0428	0.026	0.020125	0.095	0.113545	0.01875	0.0285	0.015	ERR	0.01425
Standard Deviation (STD)	0	0.0035	0.052	0.058714	0.01699	0.021751	0.23847	0.277367	0.011218	0.004233	0	ERR	0.003491
Mean + 2 STD	0.01	0.0235	0.176	0.160228	0.05998	0.063627	0.57194	0.668279	0.041187	0.036966	0.015	ERR	0.021232



AMES-STORY ENVIRONMENTAL LANDFILL

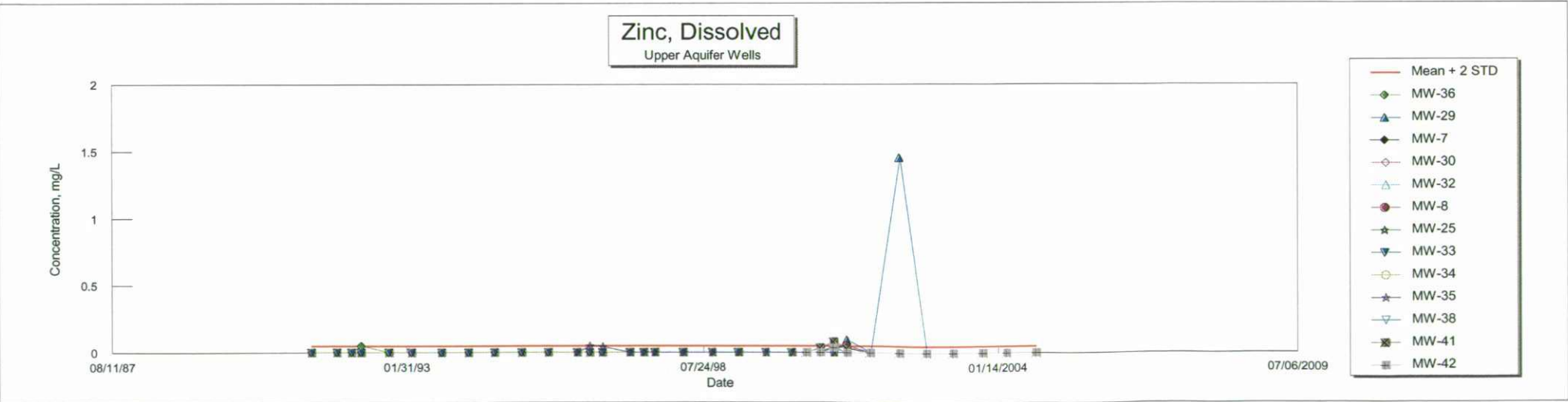
MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD AW	AQUIFER WELLS												
				U.A.W MW36	D.A.W MW 7	D.A.W MW 8	D.A.W MW 29	D.A.W MW 30	D.A.W MW 32	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.A.W MW 38	D.A.W MW 41	D.A.W MW 42
	ug/L															
04/23/91	Trichloroethene *	5	1				<1	<1	<1	<1	--	<1				
10/15/91	Trichloroethene *	5	1				<1	<1	<1	<1	--	<1				
01/23/92	Trichloroethene *	5	1				---	<1	<1	<1	<1	<1				
03/23/92	Trichloroethene *	5	1				<1	<1	<1	<1	<1	<1				
09/30/92	Trichloroethene *	5	1				NT	NT	NT	NT	NT	NT				
03/05/93	Trichloroethene *	5	1				NT	NT	NT	NT	NT	NT				
09/21/93	Trichloroethene *	5	1				NT	NT	NT	NT	NT	NT				
03/23/94	Trichloroethene *	5	1				NT	NT	NT	NT	NT	NT				
09/16/94	Trichloroethene *	5	1				NT	NT	NT	NT	NT	NT				
03/16/95	Trichloroethene *	5	1				NT	NT	NT	NT	NT	NT				
09/13/95	Trichloroethene *	5	1				NT	NT	NT	NT	NT	NT				
03/28/96	Trichloroethene *	5	1	<1			NT	NT	NT	NT	NT	NT	<1			
06/20/96	Trichloroethene *	5	1	<1			NT	NT	NT	NT	NT	NT	<1			
09/13/96	Trichloroethene *	5	1	<1			NT	NT	NT	NT	NT	NT	<1			
03/19/97	Trichloroethene *	5	1	NT			NT	NT	NT	NT	NT	NT	NT			
06/18/97	Trichloroethene *	5	1	<1			<1	NT	NT	NT	NT	NT	<1			
08/30/97	Trichloroethene *	5	1	NT			NT	NT	NT	NT	NT	NT	NT			
03/10/98	Trichloroethene *	5	1	NT			NT	NT	NT	NT	NT	NT	NT			
09/21/98	Trichloroethene *	5	1	NT			NT	NT	NT	NT	NT	NT	NT			
03/18/99	Trichloroethene *	5	1	NT			NT	NT	NT	NT	NT	NT	NT			
09/21/99	Trichloroethene *	5	1	NT			NT	NT	NT	NT	NT	NT	NT			
03/21/2000	Trichloroethene *	5	1	NT			NT	NT	NT	NT	NT	NT	NT			
06/28/2000	Trichloroethene *	5	1	NT	<1	<1	NT	NT	NT	NT	NT	NT	NT	<1	<1	<1
09/28/2000	Trichloroethene *	5	1	NT	<1	<1	<1	NT	NT	NT	NT	NT	DRY	<1	<1	<1
12/27/2000	Trichloroethene *	5	1	NT	<1	<1	NT	NT	NT	NT	NT	NT	NT	<1	<1	<1
03/28/2001	Trichloroethene *	5	1	NT	<1	<1	<1	NT	NT	NT	NT	NT	NT	<1	<1	<1
09/02/2001	Trichloroethene *	5	1	NT	NT	NT	<1	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/19/2002	Trichloroethene *	5	1	NT	NT	NT	<1	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/19/2002	Trichloroethene *	5	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/14/2003	Trichloroethene *	5	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/29/2003	Trichloroethene *	5	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/08/2004	Trichloroethene *	5	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/27/2004	Trichloroethene *	5	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Mean			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Standard Deviation (STD)			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
	Mean + 2 STD			ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

AMES-STORY ENVIRONMENTAL LANDFILL
MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD AW	AQUIFER WELLS												
				U.A.W MW36	D.A.W MW 7	D.A.W MW 8	D.A.W MW 29	D.A.W MW 30	D.A.W MW 32	BOTH MW 25	BOTH MW 33	BOTH MW 34	BOTH MW35	D.A.W MW 38	D.A.W MW 41	D.A.W MW 42
04/23/91	Zinc, dissolved	2	0.05				<0.03	<0.03	<0.03	<0.03	---	<0.03				
10/15/91	Zinc, dissolved	2	0.05				<0.03	<0.03	<0.03	<0.03	---	<0.03				
01/23/92	Zinc, dissolved	2	0.05				---	<0.03	<0.03	<0.03	<0.03	<0.03				
03/23/92	Zinc, dissolved	2	0.05				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03				
09/30/92	Zinc, dissolved	2	0.05				NT	NT	NT	NT	NT	NT				
03/05/93	Zinc, dissolved	2	0.05				NT	NT	NT	NT	NT	NT				
09/21/93	Zinc, dissolved	2	0.05				NT	NT	NT	NT	NT	NT				
03/23/94	Zinc, dissolved	2	0.05				NT	NT	NT	NT	NT	NT				
09/16/94	Zinc, dissolved	2	0.05				NT	NT	NT	NT	NT	NT				
03/16/95	Zinc, dissolved	2	0.05				NT	NT	NT	NT	NT	NT				
09/13/95	Zinc, dissolved	2	0.05				NT	NT	NT	NT	NT	NT				
03/28/96	Zinc, dissolved	2	0.05	<0.03			NT	NT	NT	NT	NT	NT	<0.03			
06/20/96	Zinc, dissolved	2	0.05	<0.03			NT	NT	NT	NT	NT	NT	0.047			
09/13/96	Zinc, dissolved	2	0.05	0.05			NT	NT	NT	NT	NT	NT	0.042			
03/19/97	Zinc, dissolved	2	0.05	NT			NT	NT	NT	NT	NT	NT	NT			
06/18/97	Zinc, dissolved	2	0.05	<0.03			<0.03	NT	NT	NT	NT	NT	<0.03			
08/30/97	Zinc, dissolved	2	0.05	NT			NT	NT	NT	NT	NT	NT	NT			
03/10/98	Zinc, dissolved	2	0.05	NT			NT	NT	NT	NT	NT	NT	NT			
09/21/98	Zinc, dissolved	2	0.05	NT			NT	NT	NT	NT	NT	NT	NT			
03/18/99	Zinc, dissolved	2	0.05	NT			NT	NT	NT	NT	NT	NT	NT			
09/21/99	Zinc, dissolved	2	0.05	NT			NT	NT	NT	NT	NT	NT	NT			
03/21/2000	Zinc, dissolved	2	0.05	NT			NT	NT	NT	NT	NT	NT	NT			
06/28/2000	Zinc, dissolved	2	0.05	NT	<0.03	<0.03	NT	NT	NT	NT	NT	NT	NT	<0.03	<0.03	<0.03
09/28/2000	Zinc, dissolved	2	0.05	NT	<0.03	<0.03	<0.03	NT	NT	NT	NT	NT	DRY	<0.03	0.035	<0.03
12/27/2000	Zinc, dissolved	2	0.05	NT	0.043	0.035	NT	NT	NT	NT	NT	NT	NT	0.032	0.081	0.036
03/28/2001	Zinc, dissolved	2	0.05	NT	0.038	0.052	0.095	NT	NT	NT	NT	NT	NT	<0.03	0.03	<0.03
09/02/2001	Zinc, dissolved	2	0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/19/2002	Zinc, dissolved	2	0.05	NT	NT	NT	1.45	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/19/2002	Zinc, dissolved	2	0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/14/2004	Zinc, dissolved	2	0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/29/2003	Zinc, dissolved	2	0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/08/2004	Zinc, dissolved	2	0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/27/2004	Zinc, dissolved	2	0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

Mean	0.05	0.0405	0.0435	0.7725	ERR	ERR	ERR	ERR	ERR	0.0445	0.032	0.048667	0.036
Standard Deviation (STD)	0	0.0025	0.0085	0.6775	ERR	ERR	ERR	ERR	ERR	0.0025	0	0.022954	0
Mean + 2 STD	0.05	0.0455	0.0605	2.1275	ERR	ERR	ERR	ERR	ERR	0.0495	0.032	0.094575	0.036



ATTACHMENT E
Concentration Versus Time Tables & Graphs
Surface Water System

DATE	PARAMETER ug/L	ACTION LEVEL	MEAN + 2 STD SW	SURFACE MONITORING PTS.					
				SW 1	SW 2	SW 3	SW 4	SW 5	SW 6
04/23/91	1,1-Dichloroethene *	7	1	<1	<1	<1			
10/15/91	1,1-Dichloroethene *	7	1	<1	<1	<1			
01/23/92	1,1-Dichloroethene *	7	1	<1	<1	<1			
03/23/92	1,1-Dichloroethene *	7	1	<1	<1	<1			
09/30/92	1,1-Dichloroethene *	7	1	NT	NT	NT			
03/05/93	1,1-Dichloroethene *	7	1	NT	NT	NT			
09/21/93	1,1-Dichloroethene *	7	1	NT	NT	NT			
03/23/94	1,1-Dichloroethene *	7	1	NT	NT	NT			
09/16/94	1,1-Dichloroethene *	7	1	NT	NT	NT			
03/16/95	1,1-Dichloroethene *	7	1	NT	NT	NT			
09/13/95	1,1-Dichloroethene *	7	1	NT	NT	NT			
03/28/96	1,1-Dichloroethene *	7	1	NT	NT	NT			
06/20/96	1,1-Dichloroethene *	7	1	NT	NT	NT			
09/13/96	1,1-Dichloroethene *	7	1	NT	NT	DRY			
03/19/97	1,1-Dichloroethene *	7	1	NT	NT	DRY			
06/18/97	1,1-Dichloroethene *	7	1	NT	NT	NT			
08/30/97	1,1-Dichloroethene *	7	1	NT	NT	DRY			
03/10/98	1,1-Dichloroethene *	7	1	NT	NT	DRY			
09/21/98	1,1-Dichloroethene *	7	1	NT	NT	DRY			
03/19/99	1,1-Dichloroethene *	7	1	NT	NT	DRY			
09/21/99	1,1-Dichloroethene *	7	1	NT	NT	DRY			
03/21/2000	1,1-Dichloroethene *	7	1	NT	NT	DRY			
06/28/2000	1,1-Dichloroethene *	7	1	NT	NT	DRY	<1	DRY	<1
09/28/2000	1,1-Dichloroethene *	7	1	NT	NT	DRY	DRY	DRY	<1
12/27/2000	1,1-Dichloroethene *	7	1	NT	NT	NT	DRY	DRY	<1
03/28/2001	1,1-Dichloroethene *	7	1	NT	NT	DRY	<1	DRY	DRY
09/02/2001	1,1-Dichloroethene *	7	1	NT	NT	DRY	NT	DRY	DRY
03/19/2002	1,1-Dichloroethene *	7	1	NT	NT	DRY	<1	DRY	<1
09/19/2002	1,1-Dichloroethene *	7	1	NT	NT	DRY	<1	<1	NT
03/14/2003	1,1-Dichloroethene *	7	1	NT	NT	DRY	NT	<1	NT
09/29/2003	1,1-Dichloroethene *	7	1	NT	NT	DRY	DRY	DRY	NT
03/08/2004	1,1-Dichloroethene *	7		NT	NT	DRY	NT	<1	NT
09/27/2004	1,1-Dichloroethene *	7	1	NT	NT	DRY	DRY	DRY	NT
Mean				ERR	ERR	ERR	ERR	ERR	ERR
Standard Deviation (STD)				ERR	ERR	ERR	ERR	ERR	ERR
Mean + 2 STD				ERR	ERR	ERR	ERR	ERR	ERR

AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER ug/L	ACTION LEVEL	MEAN + 2 STD SW	SURFACE MONITORING PTS.					
				SW 1	SW 2	SW 3	SW4	SW 5	SW 6
04/23/91	1,1,1-Trichloroethane *	200	1	<1	<1	<1			
10/15/91	1,1,1-Trichloroethane *	200	1	<1	<1	<1			
01/23/92	1,1,1-Trichloroethane *	200	1	<1	<1	<1			
03/23/92	1,1,1-Trichloroethane *	200	1	<1	<1	<1			
09/30/92	1,1,1-Trichloroethane *	200	1	NT	NT	NT			
03/05/93	1,1,1-Trichloroethane *	200	1	NT	NT	NT			
09/21/93	1,1,1-Trichloroethane *	200	1	NT	NT	NT			
03/23/94	1,1,1-Trichloroethane *	200	1	NT	NT	NT			
09/16/94	1,1,1-Trichloroethane *	200	1	NT	NT	NT			
03/16/95	1,1,1-Trichloroethane *	200	1	NT	NT	NT			
09/13/95	1,1,1-Trichloroethane *	200	1	NT	NT	NT			
03/28/96	1,1,1-Trichloroethane *	200	1	NT	NT	NT			
06/20/96	1,1,1-Trichloroethane *	200	1	NT	NT	NT			
09/13/96	1,1,1-Trichloroethane *	200	1	NT	NT	Dry			
03/19/97	1,1,1-Trichloroethane *	200	1	NT	NT	DRY			
06/18/97	1,1,1-Trichloroethane *	200	1	NT	NT	NT			
08/30/97	1,1,1-Trichloroethane *	200	1	NT	NT	DRY			
03/10/98	1,1,1-Trichloroethane *	200	1	NT	NT	DRY			
09/21/98	1,1,1-Trichloroethane *	200	1	NT	NT	DRY			
03/18/99	1,1,1-Trichloroethane *	200	1	NT	NT	DRY			
09/21/99	1,1,1-Trichloroethane *	200	1	NT	NT	DRY			
03/21/2000	1,1,1-Trichloroethane *	200	1	NT	NT	DRY			
06/28/2000	1,1,1-Trichloroethane *	200	1	NT	NT	DRY	<1	DRY	<1
09/28/2000	1,1,1-Trichloroethane *	200	1	NT	NT	DRY	DRY	DRY	<1
12/27/2000	1,1,1-Trichloroethane *	200	1	NT	NT	NT	DRY	DRY	<1
03/28/2001	1,1,1-Trichloroethane *	200	1	NT	NT	Dry	<1	DRY	DRY
09/02/2001	1,1,1-Trichloroethane *	200	1	NT	NT	Dry	NT	DRY	DRY
03/19/2002	1,1,1-Trichloroethane *	200	1	NT	NT	Dry	<1	DRY	<1
09/19/2002	1,1,1-Trichloroethane *	200	1	NT	NT	Dry	<1	<1	NT
03/14/2003	1,1,1-Trichloroethane *	200	1	NT	NT	Dry	NT	<1	NT
09/29/2003	1,1,1-Trichloroethane *	200	1	NT	NT	Dry	DRY	DRY	NT
03/08/2004	1,1,1-Trichloroethane *	200	1	NT	NT	Dry	NT	<1	NT
09/27/2004	1,1,1-Trichloroethane *	200	1	NT	NT	Dry	DRY	DRY	NT
Mean				ERR	ERR	ERR	ERR	ERR	ERR
Standard Deviation (STD)				ERR	ERR	ERR	ERR	ERR	ERR
Mean + 2 STD				ERR	ERR	ERR	ERR	ERR	ERR

AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER ug/L	ACTION LEVEL	MEAN + 2 STD SW	SURFACE MONITORING PTS.					
				SW 1	SW 2	SW 3	SW 4	SW 5	SW 6
04/23/91	1,2-Dichloroethane *	5	1	<1	<1	<1			
10/15/91	1,2-Dichloroethane *	5	1	<1	<1	<1			
01/23/92	1,2-Dichloroethane *	5	1	<1	<1	<1			
03/23/92	1,2-Dichloroethane *	5	1	<1	<1	<1			
09/30/92	1,2-Dichloroethane *	5	1	NT	NT	NT			
03/05/93	1,2-Dichloroethane *	5	1	NT	NT	NT			
09/21/93	1,2-Dichloroethane *	5	1	NT	NT	NT			
03/23/94	1,2-Dichloroethane *	5	1	NT	NT	NT			
09/16/94	1,2-Dichloroethane *	5	1	NT	NT	NT			
03/16/95	1,2-Dichloroethane *	5	1	NT	NT	NT			
09/13/95	1,2-Dichloroethane *	5	1	NT	NT	NT			
03/28/96	1,2-Dichloroethane *	5	1	NT	NT	NT			
06/20/96	1,2-Dichloroethane *	5	1	NT	NT	NT			
09/13/96	1,2-Dichloroethane *	5	1	NT	NT	DRY			
03/19/97	1,2-Dichloroethane *	5	1	NT	NT	DRY			
06/18/97	1,2-Dichloroethane *	5	1	NT	NT	NT			
08/30/97	1,2-Dichloroethane *	5	1	NT	NT	DRY			
03/10/98	1,2-Dichloroethane *	5	1	NT	NT	DRY			
09/21/98	1,2-Dichloroethane *	5	1	NT	NT	DRY			
03/18/99	1,2-Dichloroethane *	5	1	NT	NT	DRY			
03/21/99	1,2-Dichloroethane *	5	1	NT	NT	DRY			
03/21/2000	1,2-Dichloroethane *	5	1	NT	NT	DRY			
06/28/2000	1,2-Dichloroethane *	5	1	NT	NT	DRY	<0.4	DRY	<0.4
09/28/2000	1,2-Dichloroethane *	5	1	NT	NT	DRY	DRY	DRY	<0.4
12/27/2000	1,2-Dichloroethane *	5	1	NT	NT	NT	DRY	DRY	<0.4
03/28/2001	1,2-Dichloroethane *	5	1	NT	NT	DRY	<0.4	DRY	DRY
09/02/2001	1,2-Dichloroethane *	5	1	NT	NT	NT	NT	DRY	DRY
03/19/2002	1,2-Dichloroethane *	5	1	NT	NT	DRY	<0.4	DRY	<0.4
09/19/2002	1,2-Dichloroethane *	5	1	NT	NT	DRY	<0.4	<0.4	NT
03/14/2003	1,2-Dichloroethane *	5	1	NT	NT	DRY	NT	<0.4	NT
09/29/2003	1,2-Dichloroethane *	5	1	NT	NT	DRY	DRY	DRY	NT
03/08/2004	1,2-Dichloroethane *	5	1	NT	NT	DRY	NT	<0.4	NT
09/27/2004	1,2-Dichloroethane *	5	1	NT	NT	DRY	DRY	DRY	NT
Mean				ERR	ERR	ERR	ERR	ERR	ERR
Standard Deviation (STD)				ERR	ERR	ERR	ERR	ERR	ERR
Mean + 2 STD				ERR	ERR	ERR	ERR	ERR	ERR

AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD SW	SURFACE MONITORING PTS.					
				SW 1	SW 2	SW 3	SW 4	SW 5	SW 6
	ug/L								
04/23/91	1,4-Dichlorobenzene *	75	1	<1	<1	<1			
10/15/91	1,4-Dichlorobenzene *	75	1	<1	<1	<1			
01/23/92	1,4-Dichlorobenzene *	75	1	<1	<1	<1			
03/23/92	1,4-Dichlorobenzene *	75	1	<1	<1	<1			
09/30/92	1,4-Dichlorobenzene *	75	1	NT	NT	NT			
03/05/93	1,4-Dichlorobenzene *	75	1	NT	NT	NT			
09/21/93	1,4-Dichlorobenzene *	75	1	NT	NT	NT			
03/23/94	1,4-Dichlorobenzene *	75	1	NT	NT	NT			
09/16/94	1,4-Dichlorobenzene *	75	1	NT	NT	NT			
03/16/95	1,4-Dichlorobenzene *	75	1	NT	NT	NT			
09/13/95	1,4-Dichlorobenzene *	75	1	NT	NT	NT			
03/28/96	1,4-Dichlorobenzene *	75	1	NT	NT	NT			
06/20/96	1,4-Dichlorobenzene *	75	1	NT	NT	NT			
09/13/96	1,4-Dichlorobenzene *	75	1	NT	NT	DRY			
03/19/97	1,4-Dichlorobenzene *	75	1	NT	NT	DRY			
06/18/97	1,4-Dichlorobenzene *	75	1	NT	NT	NT			
08/30/97	1,4-Dichlorobenzene *	75	1	NT	NT	DRY			
03/10/98	1,4-Dichlorobenzene *	75	1	NT	NT	DRY			
09/21/98	1,4-Dichlorobenzene *	75	1	NT	NT	DRY			
03/18/99	1,4-Dichlorobenzene *	75	1	NT	NT	DRY			
09/21/99	1,4-Dichlorobenzene *	75	1	NT	NT	DRY			
03/21/2000	1,4-Dichlorobenzene *	75	1	NT	NT	DRY			
06/28/2000	1,4-Dichlorobenzene *	75	1	NT	NT	DRY	<1	DRY	<1
09/28/2000	1,4-Dichlorobenzene *	75	1	NT	NT	DRY	DRY	DRY	<1
12/27/2000	1,4-Dichlorobenzene *	75	1	NT	NT	NT	DRY	DRY	<1
03/28/2001	1,4-Dichlorobenzene *	75	1	NT	NT	DRY	<1	DRY	DRY
09/02/2001	1,4-Dichlorobenzene *	75	1	NT	NT	DRY	NT	DRY	DRY
03/19/2002	1,4-Dichlorobenzene *	75	1	NT	NT	DRY	<1	DRY	<1
09/19/2002	1,4-Dichlorobenzene *	75	1	NT	NT	DRY	<1	<1	NT
03/14/2003	1,4-Dichlorobenzene *	75	1	NT	NT	DRY	NT	<1	NT
09/29/2003	1,4-Dichlorobenzene *	75	1	NT	NT	DRY	DRY	DRY	NT
03/08/2004	1,4-Dichlorobenzene *	75	1	NT	NT	DRY	NT	<1	NT
09/27/2004	1,4-Dichlorobenzene *	75	1	NT	NT	DRY	DRY	DRY	NT
Mean				ERR	ERR	ERR	ERR	ERR	ERR
Standard Deviation (STD)				ERR	ERR	ERR	ERR	ERR	ERR
Mean + 2 STD				ERR	ERR	ERR	ERR	ERR	ERR

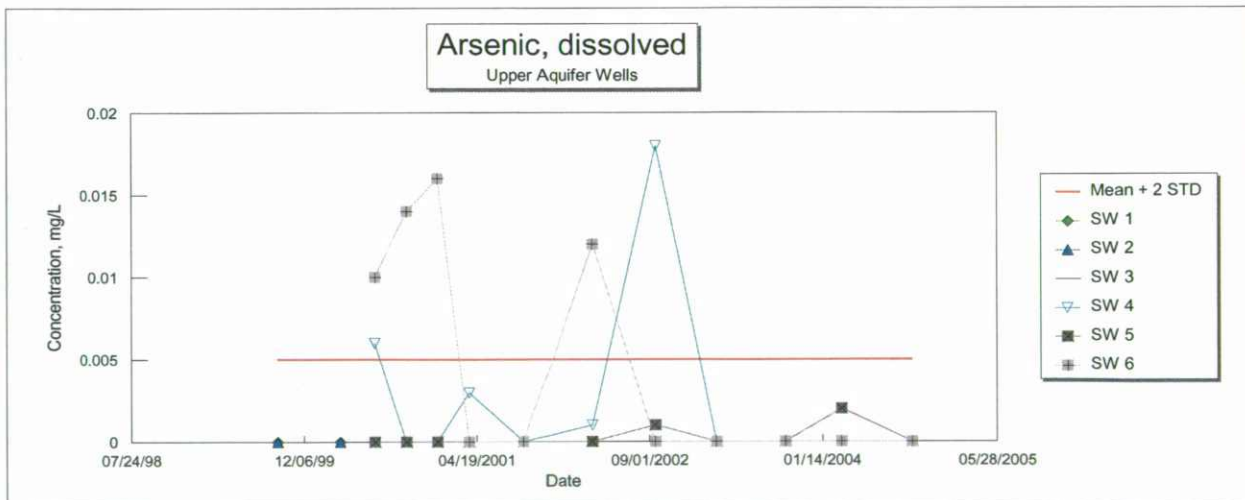
AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER mg/L	ACTION LEVEL	MEAN + 2 STD SW	SURFACE MONITORING PTS.					
				SW 1	SW 2	SW 3	SW 4	SW 5	SW 6
04/23/91	Arsenic, dissolved	0.05	0.005	<0.005	<0.005	<0.005			
10/15/91	Arsenic, dissolved	0.05	0.005	<0.005	<0.005	<0.005			
01/23/92	Arsenic, dissolved	0.05	0.005	<0.005	<0.005	<0.005			
03/23/92	Arsenic, dissolved	0.05	0.005	<0.005	<0.005	<0.005			
09/30/92	Arsenic, dissolved	0.05	0.005	NT	NT	NT			
03/05/93	Arsenic, dissolved	0.05	0.005	NT	NT	NT			
09/21/93	Arsenic, dissolved	0.05	0.005	NT	NT	NT			
03/23/94	Arsenic, dissolved	0.05	0.005	NT	NT	NT			
09/16/94	Arsenic, dissolved	0.05	0.005	NT	NT	NT			
03/16/95	Arsenic, dissolved	0.05	0.005	NT	NT	NT			
09/13/95	Arsenic, dissolved	0.05	0.005	NT	NT	NT			
03/28/96	Arsenic, dissolved	0.05	0.005	NT	NT	NT			
06/20/96	Arsenic, dissolved	0.05	0.005	NT	NT	NT			
09/13/96	Arsenic, dissolved	0.05	0.005	NT	NT	DRY			
03/19/97	Arsenic, dissolved	0.05	0.005	NT	NT	DRY			
06/18/97	Arsenic, dissolved	0.05	0.005	NT	NT	NT			
08/30/97	Arsenic, dissolved	0.05	0.005	NT	NT	DRY			
03/10/98	Arsenic, dissolved	0.05	0.005	NT	NT	DRY			
09/21/98	Arsenic, dissolved	0.05	0.005	NT	NT	DRY			
03/18/99	Arsenic, dissolved	0.05	0.005	NT	NT	DRY			
09/21/99	Arsenic, dissolved	0.05	0.005	NT	NT	DRY			
03/21/2000	Arsenic, dissolved	0.05	0.005	NT	NT	DRY			
06/28/2000	Arsenic, dissolved	0.05	0.005	NT	NT	DRY	0.006	DRY	0.01
09/28/2000	Arsenic, dissolved	0.05	0.005	NT	NT	DRY	DRY	DRY	0.014
12/27/2000	Arsenic, dissolved	0.05	0.005	NT	NT	NT	DRY	DRY	0.016
03/28/2001	Arsenic, dissolved	0.05	0.005	NT	NT	DRY	0.003	DRY	DRY
09/02/2001	Arsenic, dissolved	0.05	0.005	NT	NT	NT	NT	DRY	DRY
03/19/2002	Arsenic, dissolved	0.01	0.005	NT	NT	DRY	0.001	DRY	0.012
09/19/2002	Arsenic, dissolved	0.01	0.005	NT	NT	DRY	0.018	0.001	NT
03/14/2003	Arsenic, dissolved	0.01	0.005	NT	NT	DRY	NT	0.004	NT
09/29/2003	Arsenic, dissolved	0.01	0.005	NT	NT	DRY	DRY	DRY	NT
03/08/2004	Arsenic, dissolved	0.01	0.005	NT	NT	DRY	NT	0.002	NT
09/27/2004	Arsenic, dissolved	0.01	0.005	NT	NT	DRY	DRY	DRY	NT

Mean
Standard Deviation (STD)
Mean + 2 STD

ERR ERR ERR 0.007 0.0015 0.013
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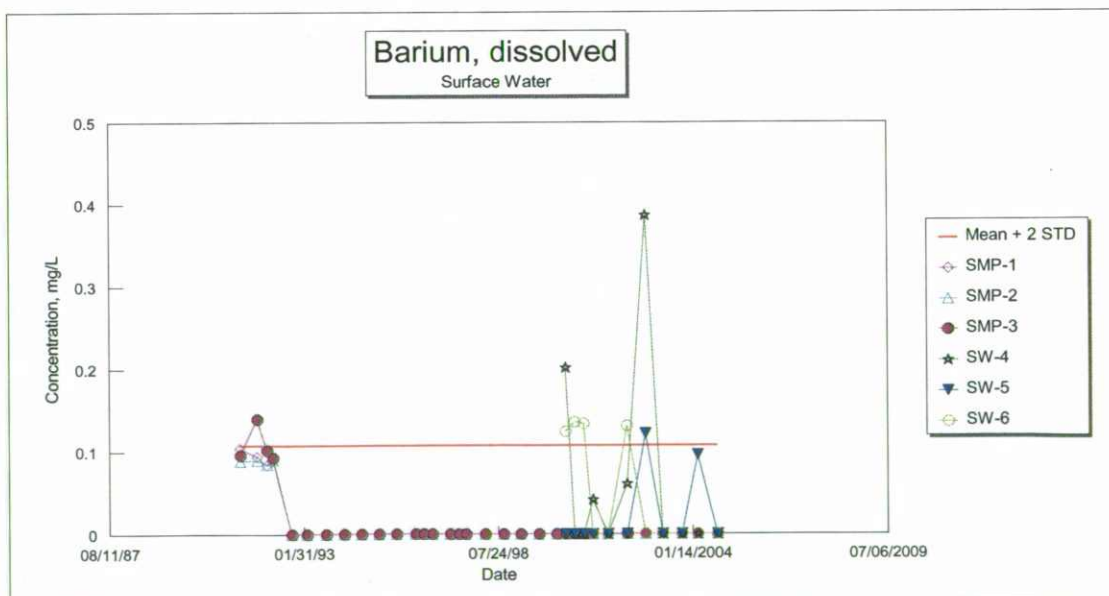


AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER mg/L	ACTION LEVEL	MEAN + 2 STD SW	SURFACE MONITORING PTS.					
				SW 1	SW 2	SW 3	SW 4	SW 5	SW 6
04/23/91	Barium, dissolved	2.000	0.108	0.104	0.089	0.096			
10/15/91	Barium, dissolved	2.000	0.108	0.094	0.090	0.140			
01/23/92	Barium, dissolved	2.000	0.108	0.084	0.085	0.102			
03/23/92	Barium, dissolved	2.000	0.108	0.090	0.091	0.093			
09/30/92	Barium, dissolved	2.000	0.108	NT	NT	NT			
03/05/93	Barium, dissolved	2.000	0.108	NT	NT	NT			
09/21/93	Barium, dissolved	2.000	0.108	NT	NT	NT			
03/23/94	Barium, dissolved	2.000	0.108	NT	NT	NT			
09/16/94	Barium, dissolved	2.000	0.108	NT	NT	NT			
03/16/95	Barium, dissolved	2.000	0.108	NT	NT	NT			
09/13/95	Barium, dissolved	2.000	0.108	NT	NT	NT			
03/28/96	Barium, dissolved	2.000	0.108	NT	NT	NT			
06/20/96	Barium, dissolved	2.000	0.108	NT	NT	NT			
09/13/96	Barium, dissolved	2.000	0.108	NT	NT	DRY			
03/19/97	Barium, dissolved	2.000	0.108	NT	NT	DRY			
06/18/97	Barium, dissolved	2.000	0.108	NT	NT	NT			
08/30/97	Barium, dissolved	2.000	0.108	NT	NT	DRY			
03/10/98	Barium, dissolved	2.000	0.108	NT	NT	DRY			
09/21/98	Barium, dissolved	2.000	0.108	NT	NT	DRY			
03/18/99	Barium, dissolved	2.000	0.108	NT	NT	DRY			
09/21/99	Barium, dissolved	2.000	0.108	NT	NT	DRY			
03/21/2000	Barium, dissolved	2.000	0.108	NT	NT	DRY			
06/28/2000	Barium, dissolved	2.000	0.108	NT	NT	DRY	0.202	DRY	0.124
09/28/2000	Barium, dissolved	2.000	0.108	NT	NT	DRY	DRY	DRY	0.136
12/27/2000	Barium, dissolved	2.000	0.108	NT	NT	NT	DRY	DRY	0.134
03/28/2001	Barium, dissolved	2.000	0.108	NT	NT	Dry	0.042	DRY	DRY
09/02/2001	Barium, dissolved	2.000	0.108	NT	NT	NT	NT	DRY	DRY
03/19/2002	Barium, dissolved	2.000	0.108	NT	NT	DRY	0.061	DRY	0.131
09/19/2002	Barium, dissolved	2.000	0.108	NT	NT	DRY	0.387	0.122	NT
03/14/2003	Barium, dissolved	2.000	0.108	NT	NT	DRY	NT	0.065	NT
09/29/2003	Barium, dissolved	2.000	0.108	NT	NT	DRY	DRY	DRY	NT
03/08/2004	Barium, dissolved	2.000	0.108	NT	NT	DRY	NT	0.096	NT
09/27/2004	Barium, dissolved	2.000	0.108	NT	NT	DRY	DRY	DRY	NT

Mean	0.093	0.08875	0.10775	0.173	0.109	0.13125
Standard Deviation (STD)	0.00728	0.002278	0.018899	0.13815	0.013	0.004548
Mean + 2 STD	0.10756	0.093305	0.145549	0.449301	0.135	0.140347



AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER ug/L	ACTION LEVEL	MEAN + 2 STD SW	SURFACE MONITORING PTS.					
				SW 1	SW 2	SW 3	SW 4	SW 5	SW 6
04/23/91	Benzene *	5	1	<1	<1	<1			
10/15/91	Benzene *	5	1	<1	<1	<1			
01/23/92	Benzene *	5	1	<1	<1	<1			
03/23/92	Benzene *	5	1	<1	<1	<1			
09/30/92	Benzene *	5	1	NT	NT	NT			
03/05/93	Benzene *	5	1	NT	NT	NT			
09/21/93	Benzene *	5	1	NT	NT	NT			
03/23/94	Benzene *	5	1	NT	NT	NT			
09/16/94	Benzene *	5	1	NT	NT	NT			
03/16/95	Benzene *	5	1	NT	NT	NT			
09/13/95	Benzene *	5	1	NT	NT	NT			
03/28/96	Benzene *	5	1	NT	NT	NT			
06/20/96	Benzene *	5	1	NT	NT	NT			
09/13/96	Benzene *	5	1	NT	NT	Dry			
03/19/97	Benzene *	5	1	NT	NT	DRY			
06/18/97	Benzene *	5	1	NT	NT	NT			
08/30/97	Benzene *	5	1	NT	NT	DRY			
03/10/98	Benzene *	5	1	NT	NT	DRY			
09/21/98	Benzene *	5	1	NT	NT	DRY			
03/18/99	Benzene *	5	1	NT	NT	DRY			
09/21/99	Benzene *	5	1	NT	NT	DRY			
03/21/2000	Benzene *	5	1	NT	NT	DRY			
06/28/2000	Benzene *	5	1	NT	NT	DRY	<1	DRY	<1
09/28/2000	Benzene *	5	1	NT	NT	DRY	DRY	NT	<1
12/27/2000	Benzene *	5	1	NT	NT	NT	DRY	DRY	<1
03/28/2001	Benzene *	5	1	NT	NT	Dry	<1	DRY	DRY
09/02/2001	Benzene *	5	1	NT	NT	NT	NT	DRY	DRY
03/19/2002	Benzene *	5	1	NT	NT	DRY	<1	NT	<1
09/19/2002	Benzene *	5	1	NT	NT	NT	<1	<1	NT
03/14/2003	Benzene *	5	1	NT	NT	NT	NT	<1	NT
09/29/2003	Benzene *	5	1	NT	NT	DRY	DRY	DRY	NT
03/08/2004	Benzene *	5	1	NT	NT	DRY	NT	<1	NT
09/27/2004	Benzene *	5	1	NT	NT	DRY	DRY	DRY	NT
Mean				ERR	ERR	ERR	ERR	ERR	ERR
Standard Deviation (STD)				ERR	ERR	ERR	ERR	ERR	ERR
Mean + 2 STD				ERR	ERR	ERR	ERR	ERR	ERR

AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER mg/L	ACTION LEVEL	MEAN + 2 STD SW	SURFACE MONITORING PTS.					
				SW 1	SW 2	SW 3	SW 4	SW 5	SW 6
04/23/91	Cadmium, dissolved	0.005	0.001	<0.001	<0.001	<0.001			
10/15/91	Cadmium, dissolved	0.005	0.001	<0.001	0.001	<0.001			
01/23/92	Cadmium, dissolved	0.005	0.001	<0.001	<0.001	<0.001			
03/23/92	Cadmium, dissolved	0.005	0.001	<0.001	<0.001	<0.001			
09/30/92	Cadmium, dissolved	0.005	0.001	NT	NT	NT			
03/05/93	Cadmium, dissolved	0.005	0.001	NT	NT	NT			
09/21/93	Cadmium, dissolved	0.005	0.001	NT	NT	NT			
03/23/94	Cadmium, dissolved	0.005	0.001	NT	NT	NT			
09/16/94	Cadmium, dissolved	0.005	0.001	NT	NT	NT			
03/16/95	Cadmium, dissolved	0.005	0.001	NT	NT	NT			
09/13/95	Cadmium, dissolved	0.005	0.001	NT	NT	NT			
03/28/96	Cadmium, dissolved	0.005	0.001	NT	NT	NT			
06/20/96	Cadmium, dissolved	0.005	0.001	NT	NT	NT			
09/13/96	Cadmium, dissolved	0.005	0.001	NT	NT	DRY			
03/19/97	Cadmium, dissolved	0.005	0.001	NT	NT	DRY			
06/18/97	Cadmium, dissolved	0.005	0.001	NT	NT	NT			
08/30/97	Cadmium, dissolved	0.005	0.001	NT	NT	DRY			
03/10/98	Cadmium, dissolved	0.005	0.001	NT	NT	DRY			
09/21/98	Cadmium, dissolved	0.005	0.001	NT	NT	DRY			
03/18/99	Cadmium, dissolved	0.005	0.001	NT	NT	DRY			
09/21/99	Cadmium, dissolved	0.005	0.001	NT	NT	DRY			
03/21/2000	Cadmium, dissolved	0.005	0.001	NT	NT	DRY			
06/28/2000	Cadmium, dissolved	0.005	0.001	NT	NT	DRY	<0.001	DRY	<0.001
09/28/2000	Cadmium, dissolved	0.005	0.001	NT	NT	DRY	NT	NT	<0.001
12/27/2000	Cadmium, dissolved	0.005	0.001	NT	NT	NT	DRY	DRY	<0.001
03/28/2001	Cadmium, dissolved	0.005	0.001	NT	NT	DRY	<0.001	DRY	DRY
09/02/2001	Cadmium, dissolved	0.005	0.001	NT	NT	NT	NT	DRY	DRY
03/19/2002	Cadmium, dissolved	0.005	0.001	NT	NT	NT	<0.001	NT	<0.001
09/19/2002	Cadmium, dissolved	0.005	0.001	NT	NT	NT	<0.001	<0.001	NT
03/14/2003	Cadmium, dissolved	0.005	0.001	NT	NT	NT	NT	<0.001	NT
09/29/2003	Cadmium, dissolved	0.005	0.001	NT	NT	DRY	DRY	DRY	NT
03/08/2004	Cadmium, dissolved	0.005	0.001	NT	NT	DRY	NT	<0.001	NT
09/27/2004	Cadmium, dissolved	0.005	0.001	NT	NT	DRY	DRY	DRY	NT
Mean				ERR	ERR	ERR	ERR	ERR	ERR
Standard Deviation (STD)				ERR	ERR	ERR	ERR	ERR	ERR
Mean + 2 STD				ERR	ERR	ERR	ERR	ERR	ERR

AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

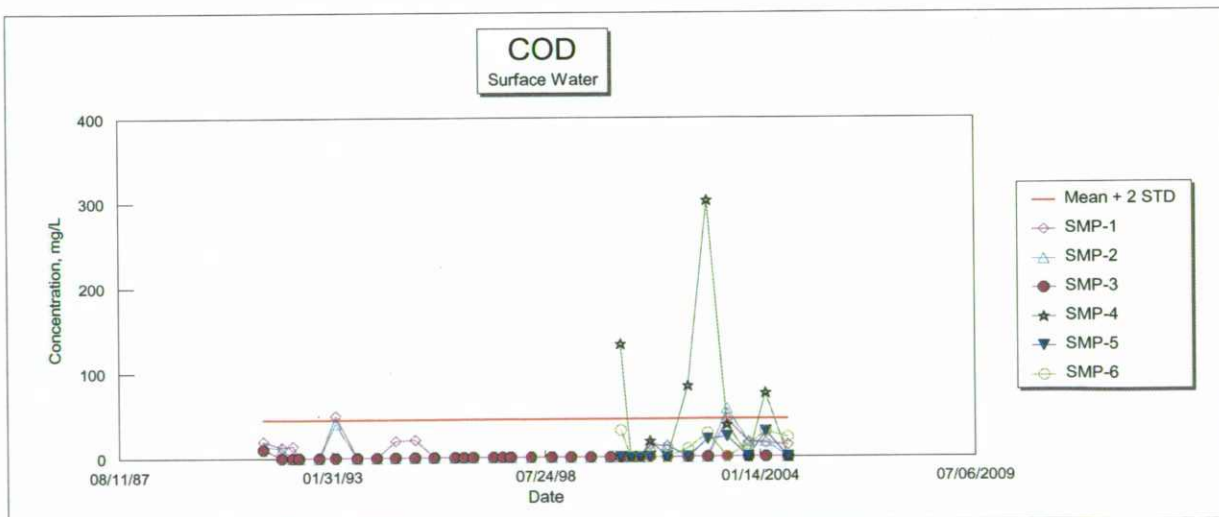
DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD SW	SURFACE MONITORING PTS.					
				SW 1	SW 2	SW 3	SW 4	SW 5	SW 6
	ug/L								
04/23/91	Carbon tetrachloride *	5	1	<1	<1	<1			
10/15/91	Carbon tetrachloride *	5	1	<1	<1	<1			
01/23/92	Carbon tetrachloride *	5	1	<1	<1	<1			
03/23/92	Carbon tetrachloride *	5	1	<1	<1	<1			
09/30/92	Carbon tetrachloride *	5	1	NT	NT	NT			
03/05/93	Carbon tetrachloride *	5	1	NT	NT	NT			
09/21/93	Carbon tetrachloride *	5	1	NT	NT	NT			
03/23/94	Carbon tetrachloride *	5	1	NT	NT	NT			
09/16/94	Carbon tetrachloride *	5	1	NT	NT	NT			
03/16/95	Carbon tetrachloride *	5	1	NT	NT	NT			
09/13/95	Carbon tetrachloride *	5	1	NT	NT	NT			
03/28/96	Carbon tetrachloride *	5	1	NT	NT	NT			
06/20/96	Carbon tetrachloride *	5	1	NT	NT	NT			
09/13/96	Carbon tetrachloride *	5	1	NT	NT	DRY			
03/19/97	Carbon tetrachloride *	5	1	NT	NT	DRY			
06/18/97	Carbon tetrachloride *	5	1	NT	NT	NT			
08/30/97	Carbon tetrachloride *	5	1	NT	NT	DRY			
03/10/98	Carbon tetrachloride *	5	1	NT	NT	DRY			
09/21/98	Carbon tetrachloride *	5	1	NT	NT	DRY			
03/18/99	Carbon tetrachloride *	5	1	NT	NT	DRY			
09/21/99	Carbon tetrachloride *	5	1	NT	NT	DRY			
03/21/2000	Carbon tetrachloride *	5	1	NT	NT	DRY			
06/28/2000	Carbon tetrachloride *	5	1	NT	NT	DRY	<0.3	DRY	<0.3
09/28/2000	Carbon tetrachloride *	5	1	NT	NT	DRY	DRY	DRY	<0.3
12/27/2000	Carbon tetrachloride *	5	1	NT	NT	NT	DRY	DRY	<0.3
03/28/2001	Carbon tetrachloride *	5	1	NT	NT	DRY	<0.3	DRY	DRY
09/02/2001	Carbon tetrachloride *	5	1	NT	NT	NT	NT	DRY	DRY
03/19/2002	Carbon tetrachloride *	5	1	NT	NT	NT	<0.3	NT	<0.3
09/19/2002	Carbon tetrachloride *	5	1	NT	NT	NT	<0.3	<0.3	NT
03/14/2003	Carbon tetrachloride *	5	1	NT	NT	NT	NT	<0.3	NT
09/29/2003	Carbon tetrachloride *	5	1	NT	NT	DRY	DRY	DRY	NT
03/08/2004	Carbon tetrachloride *	5	1	NT	NT	DRY	NT	<0.3	NT
09/27/2004	Carbon tetrachloride *	5	1	NT	NT	DRY	DRY	DRY	NT
Mean				ERR	ERR	ERR	ERR	ERR	ERR
Standard Deviation (STD)				ERR	ERR	ERR	ERR	ERR	ERR
Mean + 2 STD				ERR	ERR	ERR	ERR	ERR	ERR

AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER mg/L	ACTION LEVEL	MEAN + 2 STD SW	SURFACE MONITORING PTS.					
				SW 1	SW 2	SW 3	SW 4	SW 5	SW 6
04/23/91	Chemical Oxygen Demand	--	44.8157	19.4	14.3	10.5			
10/15/91	Chemical Oxygen Demand	--	44.8157	12.8	11.3	<10			
01/23/92	Chemical Oxygen Demand	--	44.8157	14.3	<10	<10			
03/23/92	Chemical Oxygen Demand	--	44.8157	<10	<10	<10			
09/30/92	Chemical Oxygen Demand	--	44.8157	<10	<10	DRY			
03/05/93	Chemical Oxygen Demand	--	44.8157	49.6	40.8	DRY			
09/21/93	Chemical Oxygen Demand	--	44.8157	<10	<10	<10			
03/23/94	Chemical Oxygen Demand	--	44.8157	<10	<10	<10			
09/16/94	Chemical Oxygen Demand	--	44.8157	20	<10	NT			
03/16/95	Chemical Oxygen Demand	--	44.8157	21	<10	NT			
09/13/95	Chemical Oxygen Demand	--	44.8157	<10	<10	NT			
03/28/96	Chemical Oxygen Demand	--	44.8157	<10	<10	NT			
06/20/96	Chemical Oxygen Demand	--	44.8157	NT	NT	NT			
09/13/96	Chemical Oxygen Demand	--	44.8157	<10	<10	DRY			
03/19/97	Chemical Oxygen Demand	--	44.8157	<10	<10	DRY			
06/18/97	Chemical Oxygen Demand	--	44.8157	NT	NT	NT			
08/30/97	Chemical Oxygen Demand	--	44.8157	<10	<10	DRY			
03/10/98	Chemical Oxygen Demand	--	44.8157	<10	<10	DRY			
09/21/98	Chemical Oxygen Demand	--	44.8157	<10	<10	DRY			
03/18/99	Chemical Oxygen Demand	--	44.8157	<10	<10	DRY			
09/21/99	Chemical Oxygen Demand	--	44.8157	<10	<10	DRY			
03/21/2000	Chemical Oxygen Demand	--	44.8157	<10	<10	DRY			
06/28/2000	Chemical Oxygen Demand	--	44.8157	NT	NT	DRY	133	DRY	32
09/28/2000	Chemical Oxygen Demand	--	44.8157	<10	<10	DRY	DRY	DRY	<10
12/27/2000	Chemical Oxygen Demand	--	44.8157	NT	NT	NT	DRY	DRY	<10
03/28/2001	Chemical Oxygen Demand	--	44.8157	14	13	DRY	19	DRY	DRY
09/02/2001	Chemical Oxygen Demand	--	44.8157	13	14	DRY	NT	DRY	DRY
03/19/2002	Chemical Oxygen Demand	--	44.8157	<10	<10	DRY	84	DRY	10
09/19/2002	Chemical Oxygen Demand	--	44.8157	<10	<10	DRY	302	21	28
03/14/2003	Chemical Oxygen Demand	--	44.8157	44	57	DRY	38	24	<10
09/29/2003	Chemical Oxygen Demand	--	44.8157	17	18	DRY	DRY	DRY	14
03/08/2004	Chemical Oxygen Demand	--	44.8157	16	18	DRY	75	30	30
09/27/2004	Chemical Oxygen Demand	--	44.8157	14	<10	DRY	DRY	DRY	23

Mean	21.25833	23.3	10.5	108.5	25	22.83333
Standard Deviation (STD)	11.77869	15.47458	0	93.75989	3.741657	8.214148
Mean + 2 STD	44.8157	54.24915	10.5	296.0198	32.48331	39.26163

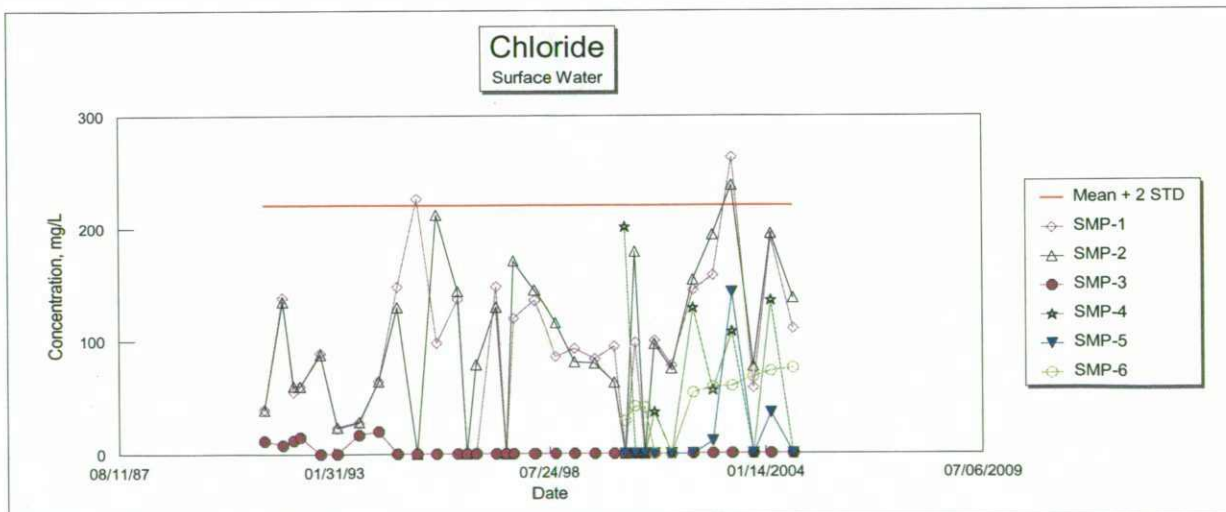


AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER mg/L	Secondary MCL LEVEL	MEAN + 2 STD SW	SURFACE MONITORING PTS.					
				SW 1	SW 2	SW 3	SW 4	SW 5	SW 6
04/23/91	Chloride	250	220.275	39.5	39	11.5			
10/15/91	Chloride	250	220.275	138	135	8.02			
01/23/92	Chloride	250	220.275	55.1	60.3	12.1			
03/23/92	Chloride	250	220.275	59.7	60.2	14.8			
09/30/92	Chloride	250	220.275	89	88	DRY			
03/05/93	Chloride	250	220.275	22.5	23.5	DRY			
09/21/93	Chloride	250	220.275	27.4	28.4	16.6			
03/23/94	Chloride	250	220.275	64.1	64.1	19.8			
09/16/94	Chloride	250	220.275	148	130	NT			
03/16/95	Chloride	250	220.275	226	NT	NT			
09/13/95	Chloride	250	220.275	98	212	NT			
03/28/96	Chloride	250	220.275	137	144	NT			
06/20/96	Chloride	250	220.275	NT	NT	NT			
09/13/96	Chloride	250	220.275	<1	78.9	Dry			
03/19/97	Chloride	250	220.275	148	130	DRY			
06/18/97	Chloride	250	220.275	NT	NT	NT			
08/30/97	Chloride	250	220.275	120	171	DRY			
03/10/98	Chloride	250	220.275	136	145	DRY			
09/21/98	Chloride	250	220.275	86	116	DRY			
03/18/99	Chloride	250	220.275	93	81	DRY			
09/21/99	Chloride	250	220.275	84	80	DRY			
03/21/2000	Chloride	250	220.275	95	63	DRY			
06/28/2000	Chloride	250	220.275	NT	NT	DRY	201	DRY	29
09/28/2000	Chloride	250	220.275	98	179	DRY	DRY	DRY	42
12/27/2000	Chloride	250	220.275	NT	NT	NT	DRY	DRY	41
03/28/2001	Chloride	250	220.275	100	97	DRY	37	DRY	DRY
09/02/2001	Chloride	250	220.275	78	75	DRY	NT	DRY	DRY
03/19/2002	Chloride	250	220.275	145	154	DRY	129	DRY	54
09/19/2002	Chloride	250	220.275	158	194	DRY	56	11	59
03/14/2003	Chloride	250	220.275	263	238	DRY	108	143	60
09/29/2003	Chloride	250	220.275	58	77	DRY	DRY	DRY	68
03/08/2004	Chloride	250	220.275	192	195	DRY	136	36	73
09/27/2004	Chloride	250	220.275	111	138	DRY	DRY	DRY	76

Mean	109.6179	114.1571	13.80333	111.1667	63.33333	55.77778
Standard Deviation (STD)	55.32859	56.61653	3.795355	54.09688	57.24994	14.95012
Mean + 2 STD	220.275	227.3902	21.39404	219.3604	177.8332	85.67802



AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

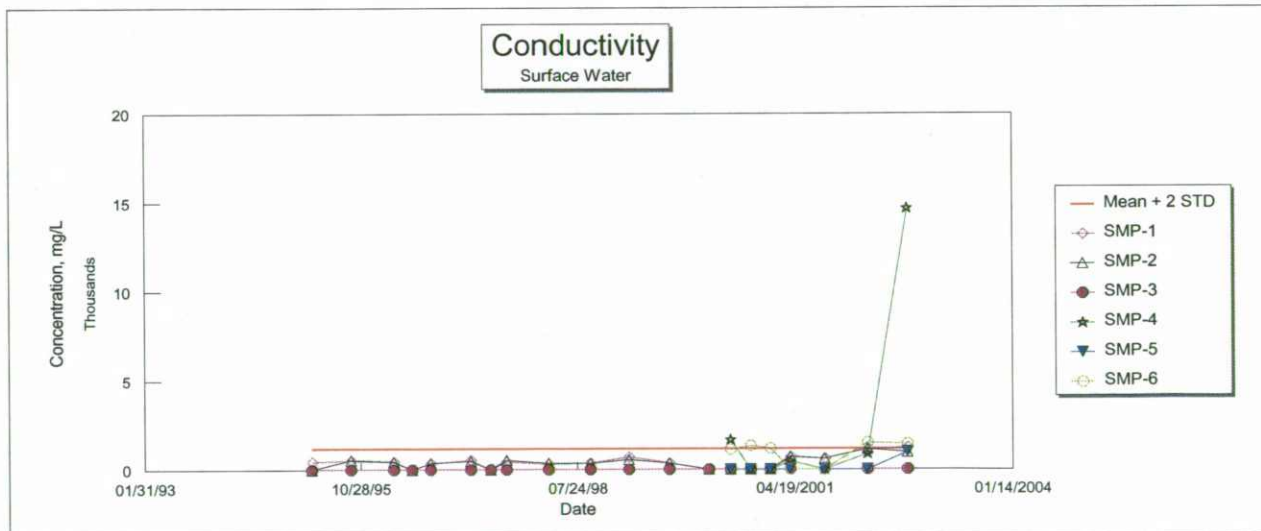
DATE	PARAMETER mg/L	ACTION LEVEL	MEAN + 2 STD SW	SURFACE MONITORING PTS.					
				SW 1	SW 2	SW 3	SW 4	SW 5	SW 6
04/23/91	Chromium, dissolved	0.1	0.03	<0.03	<0.03	<0.03			
10/15/91	Chromium, dissolved	0.1	0.03	<0.03	<0.03	<0.03			
01/23/92	Chromium, dissolved	0.1	0.03	<0.03	<0.03	<0.03			
03/23/92	Chromium, dissolved	0.1	0.03	<0.03	<0.03	<0.03			
09/30/92	Chromium, dissolved	0.1	0.03	NT	NT	NT			
03/05/93	Chromium, dissolved	0.1	0.03	NT	NT	NT			
09/21/93	Chromium, dissolved	0.1	0.03	NT	NT	NT			
03/23/94	Chromium, dissolved	0.1	0.03	NT	NT	NT			
09/16/94	Chromium, dissolved	0.1	0.03	NT	NT	NT			
03/16/95	Chromium, dissolved	0.1	0.03	NT	NT	NT			
09/13/95	Chromium, dissolved	0.1	0.03	NT	NT	NT			
03/28/96	Chromium, dissolved	0.1	0.03	NT	NT	NT			
06/20/96	Chromium, dissolved	0.1	0.03	NT	NT	NT			
09/13/96	Chromium, dissolved	0.1	0.03	NT	NT	DRY			
03/19/97	Chromium, dissolved	0.1	0.03	NT	NT	DRY			
06/18/97	Chromium, dissolved	0.1	0.03	NT	NT	NT			
08/30/97	Chromium, dissolved	0.1	0.03	NT	NT	DRY			
03/10/98	Chromium, dissolved	0.1	0.03	NT	NT	DRY			
09/21/98	Chromium, dissolved	0.1	0.03	NT	NT	DRY			
03/18/99	Chromium, dissolved	0.1	0.03	NT	NT	DRY			
09/21/99	Chromium, dissolved	0.1	0.03	NT	NT	DRY			
03/21/2000	Chromium, dissolved	0.1	0.03	NT	NT	DRY			
06/28/2000	Chromium, dissolved	0.1	0.03	NT	NT	DRY	<0.03	DRY	<0.03
09/28/2000	Chromium, dissolved	0.1	0.03	NT	NT	DRY	DRY	DRY	<0.03
12/27/2000	Chromium, dissolved	0.1	0.03	NT	NT	NT	DRY	DRY	<0.03
03/28/2001	Chromium, dissolved	0.1	0.03	NT	NT	DRY	<0.03	DRY	DRY
09/02/2001	Chromium, dissolved	0.1	0.03	NT	NT	NT	NT	DRY	DRY
03/19/2002	Chromium, dissolved	0.1	0.03	NT	NT	NT	<0.005	Dry	<0.005
09/19/2002	Chromium, dissolved	0.1	0.03	NT	NT	NT	<0.005	<0.005	NT
03/14/2003	Chromium, dissolved	0.1	0.03	NT	NT	DRY	NT	<0.005	NT
09/29/2003	Chromium, dissolved	0.1	0.03	NT	NT	DRY	DRY	DRY	NT
03/08/2004	Chromium, dissolved	0.1	0.03	NT	NT	DRY	NT	<0.005	NT
09/27/2004	Chromium, dissolved	0.1	0.03	NT	NT	DRY	DRY	DRY	NT
Mean				ERR	ERR	ERR	ERR	ERR	ERR
Standard Deviation (STD)				ERR	ERR	ERR	ERR	ERR	ERR
Mean + 2 STD				ERR	ERR	ERR	ERR	ERR	ERR

AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD SW	SURFACE MONITORING PTS.					
				SW 1	SW 2	SW 3	SW 4	SW 5	SW 6
03/16/95	Conductivity, mv	--	1158.373	420	DRY	DRY			
09/13/95	Conductivity, mv	--	1158.373	500	540	DRY			
03/28/96	Conductivity, mv	--	1158.373	420	450	DRY			
06/20/96	Conductivity, mv	--	1158.373	NT	NT	DRY			
09/13/96	Conductivity, mv	--	1158.373	360	370	DRY			
03/19/97	Conductivity, mv	--	1158.373	520	490	DRY			
06/18/97	Conductivity, mv	--	1158.373	NT	NT	NT			
08/30/97	Conductivity, mv	--	1158.373	430	540	DRY			
03/10/98	Conductivity, mv	--	1158.373	300	350	DRY			
09/21/98	Conductivity, mv	--	1158.373	350	360	DRY			
03/18/99	Conductivity, mv	--	1158.373	702	560	DRY			
09/21/99	Conductivity, mv	--	1158.373	360	350	DRY			
03/21/2000	Conductivity, mv	--	1158.373	NT	NT	DRY			
06/28/2000	Conductivity, mv	--	1158.373	NT	NT	DRY	1670	DRY	1123
09/28/2000	Conductivity, mv	--	1158.373	NT	NT	DRY	DRY	DRY	1332
12/27/2000	Conductivity, mv	--	1158.373	NT	NT	NT	DRY	DRY	1183
03/28/2001	Conductivity, mv	--	1158.373	685	702	DRY	442	DRY	DRY
09/02/2001	Conductivity, mv	--	1158.373	586	583	DRY	NT	DRY	DRY
03/19/2002	Conductivity, mv	--	1158.373	1127	1127	DRY	880	DRY	1505
10/07/2002	Conductivity, mv	--	1158.373	1209	960	DRY	14680	990	1444
03/14/2003	Conductivity, mv	--	1158.373	750	780	DRY	1260	860	625
09/29/2003	Conductivity, mv	--	1158.373	468	675	DRY	DRY	DRY	1262
03/08/2004	Conductivity, mv	--	1158.373	1017	1025	DRY	3622	886	1475
09/27/2004	Conductivity, mv	--	1158.373	871	1096	DRY	DRY	DRY	1400

Mean	615.2778	644.5882	ERR	3759	912	1261
Standard Deviation (STD)	271.5478	257.5667	ERR	4986.433	56.16642	256.6468
Mean + 2 STD	1158.373	1159.722	ERR	13731.87	1024.333	1774.294



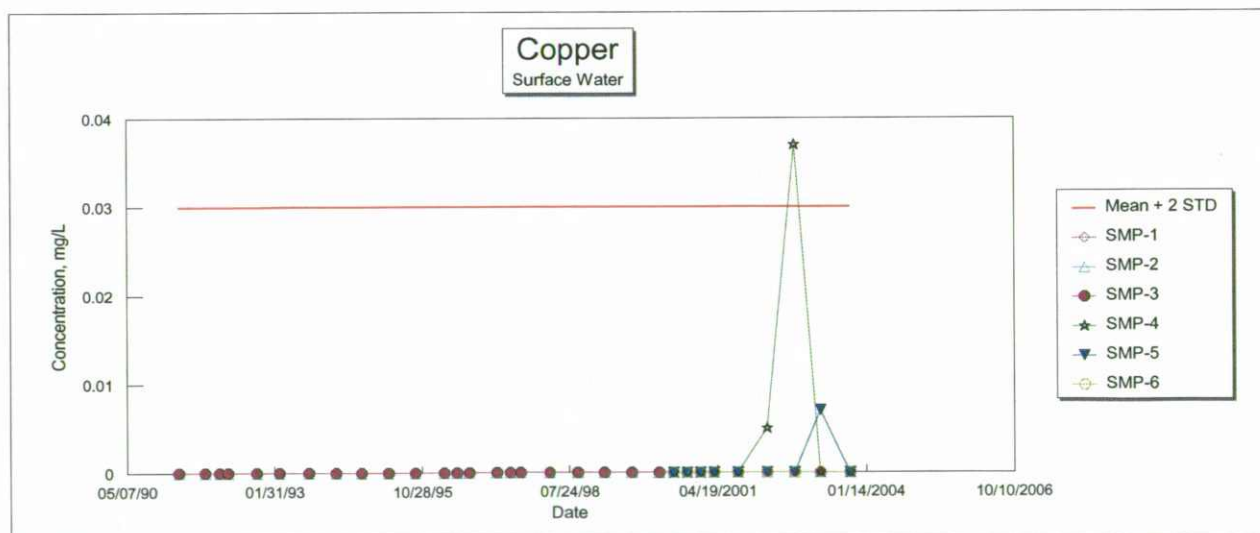
AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER mg/L	ACTION LEVEL	MEAN + 2 STD SW	SURFACE MONITORING PTS.					
				SW 1	SW 2	SW 3	SW 4	SW 5	SW 6
04/23/91	Copper, dissolved	1.3	0.03	<0.03	<0.03	<0.03			
10/15/91	Copper, dissolved	1.3	0.03	<0.03	<0.03	<0.03			
01/23/92	Copper, dissolved	1.3	0.03	<0.03	<0.03	<0.03			
03/23/92	Copper, dissolved	1.3	0.03	<0.03	<0.03	<0.03			
09/30/92	Copper, dissolved	1.3	0.03	NT	NT	NT			
03/05/93	Copper, dissolved	1.3	0.03	NT	NT	NT			
09/21/93	Copper, dissolved	1.3	0.03	NT	NT	NT			
03/23/94	Copper, dissolved	1.3	0.03	NT	NT	NT			
09/16/94	Copper, dissolved	1.3	0.03	NT	NT	NT			
03/16/95	Copper, dissolved	1.3	0.03	NT	NT	NT			
09/13/95	Copper, dissolved	1.3	0.03	NT	NT	NT			
03/28/96	Copper, dissolved	1.3	0.03	NT	NT	NT			
06/20/96	Copper, dissolved	1.3	0.03	NT	NT	NT			
09/13/96	Copper, dissolved	1.3	0.03	NT	NT	DRY			
03/19/97	Copper, dissolved	1.3	0.03	NT	NT	DRY			
06/18/97	Copper, dissolved	1.3	0.03	NT	NT	NT			
08/30/97	Copper, dissolved	1.3	0.03	NT	NT	DRY			
03/10/98	Copper, dissolved	1.3	0.03	NT	NT	DRY			
09/21/98	Copper, dissolved	1.3	0.03	NT	NT	DRY			
03/18/99	Copper, dissolved	1.3	0.03	NT	NT	DRY			
09/21/99	Copper, dissolved	1.3	0.03	NT	NT	DRY			
03/21/2000	Copper, dissolved	1.3	0.03	NT	NT	DRY			
06/28/2000	Copper, dissolved	1.3	0.03	NT	NT	DRY	<0.03	DRY	<0.03
09/28/2000	Copper, dissolved	1.3	0.03	NT	NT	DRY	DRY	DRY	<0.03
12/27/2000	Copper, dissolved	1.3	0.03	NT	NT	NT	Dry	DRY	<0.03
03/28/2001	Copper, dissolved	1.3	0.03	NT	NT	DRY	<0.03	DRY	DRY
09/02/2001	Copper, dissolved	1.3	0.03	NT	NT	NT	NT	DRY	DRY
03/19/2002	Copper, dissolved	1.3	0.03	NT	NT	NT	0.005	NT	<0.005
10/07/2002	Copper, dissolved	1.3	0.03	NT	NT	NT	0.037	<0.005	NT
03/14/2003	Copper, dissolved	1.3	0.03	NT	NT	DRY	NT	0.007	NT
09/29/2003	Copper, dissolved	1.3	0.03	NT	NT	DRY	DRY	DRY	NT
03/08/2004	Copper, dissolved	1.3	0.03	NT	NT	DRY	NT	0.005	NT
09/27/2004	Copper, dissolved	1.3	0.03	NT	NT	DRY	DRY	DRY	NT

Mean
Standard Deviation (STD)
Mean + 2 STD

ERR	ERR	ERR	0.021	0.006	ERR
ERR	ERR	ERR	0.016	0.001	ERR
ERR	ERR	ERR	0.053	0.008	ERR

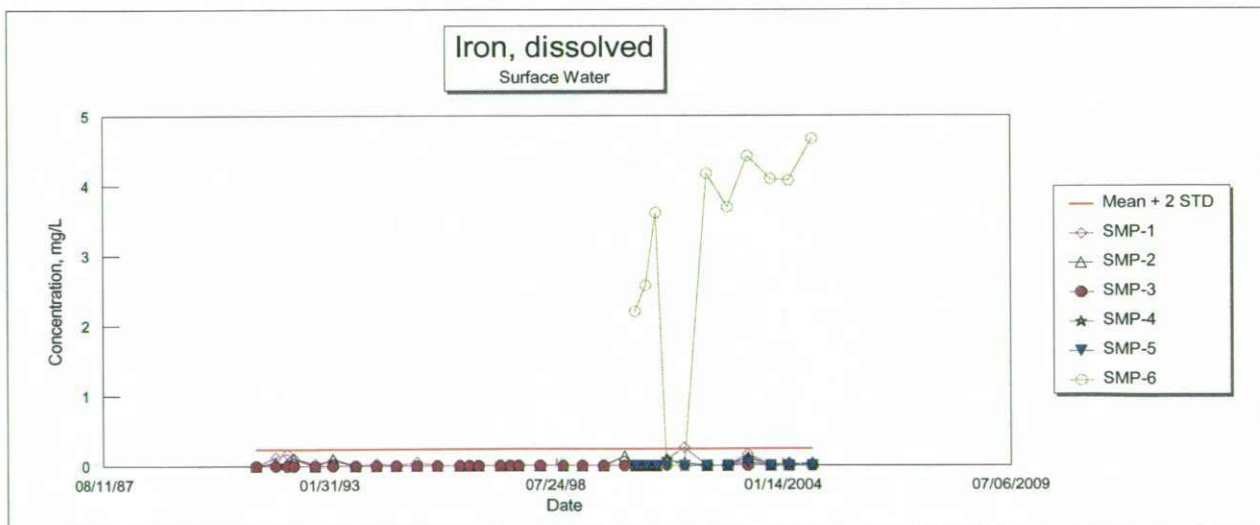


AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER mg/L	ACTION LEVEL	MEAN + 2 STD SW	SURFACE MONITORING PTS.					
				SW 1	SW 2	SW 3	SW 4	SW 5	SW 6
04/23/91	Iron, dissolved	--	0.238705	<0.114	<0.111	<0.03			
10/15/91	Iron, dissolved	--	0.238705	0.125	0.045	<0.03			
01/23/92	Iron, dissolved	--	0.238705	0.172	0.036	<0.03			
03/23/92	Iron, dissolved	--	0.238705	0.109	0.109	<0.03			
09/30/92	Iron, dissolved	--	0.238705	0.034	<0.03	DRY			
03/05/93	Iron, dissolved	--	0.238705	0.078	0.102	DRY			
09/21/93	Iron, dissolved	--	0.238705	<0.03	<0.03	<0.03			
03/23/94	Iron, dissolved	--	0.238705	0.035	<0.03	<0.03			
09/16/94	Iron, dissolved	--	0.238705	<0.03	<0.03	NT			
03/16/95	Iron, dissolved	--	0.238705	0.05	<0.03	NT			
09/13/95	Iron, dissolved	--	0.238705	<0.03	<0.03	NT			
03/28/96	Iron, dissolved	--	0.238705	<0.03	<0.03	NT			
06/20/96	Iron, dissolved	--	0.238705	NT	NT	NT			
09/13/96	Iron, dissolved	--	0.238705	<0.03	<0.03	DRY			
03/19/97	Iron, dissolved	--	0.238705	<0.03	<0.03	DRY			
06/18/97	Iron, dissolved	--	0.238705	NT	NT	NT			
08/30/97	Iron, dissolved	--	0.238705	<0.03	<0.03	DRY			
03/10/98	Iron, dissolved	--	0.238705	<0.03	<0.03	DRY			
09/21/98	Iron, dissolved	--	0.238705	<0.03	<0.03	DRY			
03/18/99	Iron, dissolved	--	0.238705	<0.03	<0.03	DRY			
09/21/99	Iron, dissolved	--	0.238705	<0.03	<0.03	DRY			
03/21/2000	Iron, dissolved	--	0.238705	<0.03	0.137	DRY			
06/28/2000	Iron, dissolved	--	0.238705	NT	NT	DRY	<0.03	DRY	2.2
09/28/2000	Iron, dissolved	--	0.238705	<0.03	<0.03	DRY	DRY	DRY	2.57
12/27/2000	Iron, dissolved	--	0.238705	NT	NT	NT	DRY	DRY	3.61
03/28/2001	Iron, dissolved	--	0.238705	0.085	0.073	DRY	0.094	DRY	DRY
09/02/2001	Iron, dissolved	--	0.238705	0.257	0.042	DRY	NT	DRY	DRY
03/19/2002	Iron, dissolved	--	0.238705	<0.03	<0.03	DRY	<0.03	DRY	4.17
10/07/2002	Iron, dissolved	--	0.238705	<0.03	<0.03	DRY	<0.03	<0.03	3.69
03/14/2003	Iron, dissolved	--	0.238705	0.162	0.117	DRY	0.108	0.051	4.42
09/29/2003	Iron, dissolved	--	0.238705	<0.030	<0.030	DRY	DRY	DRY	4.09
03/08/2004	Iron, dissolved	--	0.238705	0.038	<0.030	DRY	0.032	<0.03	4.07
09/27/2004	Iron, dissolved	--	0.238705	<0.030	0.036	DRY	DRY	DRY	4.67

Mean	0.104091	0.077444	ERR	0.078	0.051	3.721111
Standard Deviation (STD)	0.067307	0.032749	ERR	0.033025	0	0.781756
Mean + 2 STD	0.238705	0.142943	ERR	0.14405	0.051	5.284624

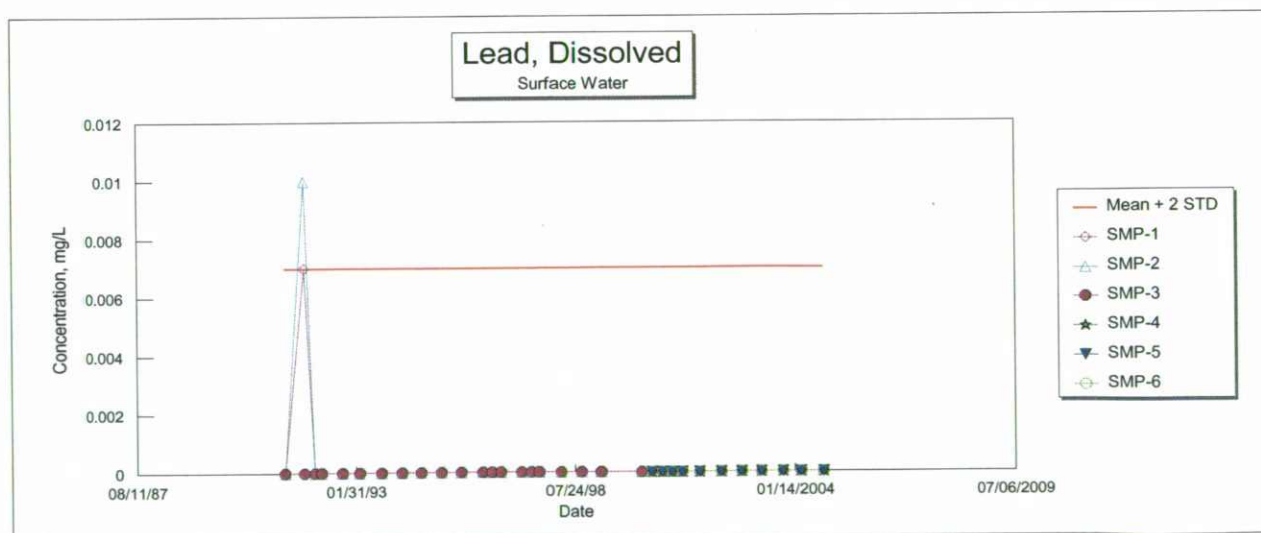


AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER mg/L	ACTION LEVEL	MEAN + 2 STD SW	SURFACE MONITORING PTS.					
				SW 1	SW 2	SW 3	SW 4	SW 5	SW 6
04/23/91	Lead, dissolved	0.015	0.007	<0.005	<0.005	<0.005			
10/15/91	Lead, dissolved	0.015	0.007	0.007	0.01	<0.005			
01/23/92	Lead, dissolved	0.015	0.007	<0.005	<0.005	<0.005			
03/23/92	Lead, dissolved	0.015	0.007	<0.005	<0.005	<0.005			
09/30/92	Lead, dissolved	0.015	0.007	NT	NT	NT			
03/05/93	Lead, dissolved	0.015	0.007	NT	NT	NT			
09/21/93	Lead, dissolved	0.015	0.007	NT	NT	NT			
03/23/94	Lead, dissolved	0.015	0.007	NT	NT	NT			
09/16/94	Lead, dissolved	0.015	0.007	NT	NT	NT			
03/16/95	Lead, dissolved	0.015	0.007	NT	NT	NT			
09/13/95	Lead, dissolved	0.015	0.007	NT	NT	NT			
03/28/96	Lead, dissolved	0.015	0.007	NT	NT	NT			
06/20/96	Lead, dissolved	0.015	0.007	NT	NT	NT			
09/13/96	Lead, dissolved	0.015	0.007	NT	NT	DRY			
03/19/97	Lead, dissolved	0.015	0.007	NT	NT	DRY			
06/18/97	Lead, dissolved	0.015	0.007	NT	NT	NT			
08/30/97	Lead, dissolved	0.015	0.007	NT	NT	DRY			
03/10/98	Lead, dissolved	0.015	0.007	NT	NT	DRY			
09/21/98	Lead, dissolved	0.015	0.007	NT	NT	DRY			
03/18/99	Lead, dissolved	0.015	0.007	NT	NT	DRY			
03/21/99	Lead, dissolved	0.015	0.007	NT	NT	DRY			
03/21/2000	Lead, dissolved	0.015	0.007	NT	NT	DRY	<0.005	DRY	<0.005
06/28/2000	Lead, dissolved	0.015	0.007	NT	NT	DRY	DRY	DRY	<0.005
09/28/2000	Lead, dissolved	0.015	0.007	NT	NT	DRY	DRY	DRY	<0.005
12/27/2000	Lead, dissolved	0.015	0.007	NT	NT	NT	DRY	DRY	<0.005
03/28/2001	Lead, dissolved	0.015	0.007	NT	NT	DRY	<0.005	DRY	DRY
09/02/2001	Lead, dissolved	0.015	0.007	NT	NT	NT	NT	DRY	DRY
03/19/2002	Lead, dissolved	0.015	0.007	NT	NT	NT	<0.005	NT	<0.005
10/07/2002	Lead, dissolved	0.015	0.007	NT	NT	NT	<0.005	<0.005	NT
03/14/2003	Lead, dissolved	0.015	0.007	NT	NT	DRY	NT	<0.005	NT
09/29/2003	Lead, dissolved	0.015	0.007	NT	NT	DRY	DRY	Dry	NT
03/08/2004	Lead, dissolved	0.015	0.007	NT	NT	DRY	NT	<0.005	NT
09/27/2004	Lead, dissolved	0.015	0.007	NT	NT	DRY	DRY	DRY	NT

Mean	0.007	0.01	ERR	ERR	ERR	ERR
Standard Deviation (STD)	0	0	ERR	ERR	ERR	ERR
Mean + 2 STD	0.007	0.01	ERR	ERR	ERR	ERR

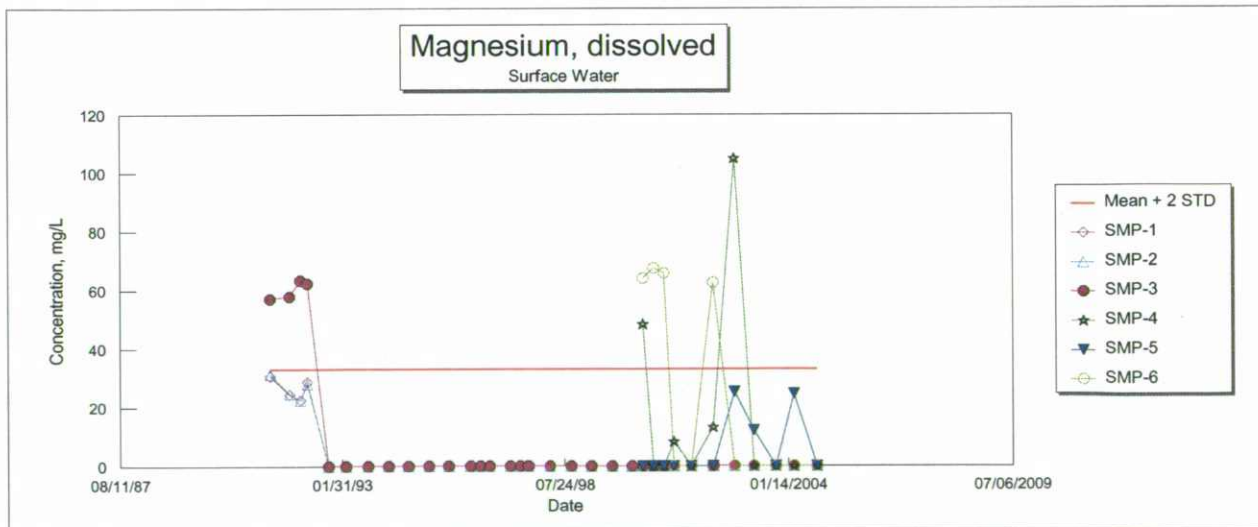


AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD SW	SURFACE MONITORING PTS.					
				SW 1	SW 2	SW 3	SW 4	SW 5	SW 6
	mg/L								
04/23/91	Magnesium, dissolved	--	32.97694	30.6	31.3	57			
10/15/91	Magnesium, dissolved	--	32.97694	24.4	24.7	57.8			
01/23/92	Magnesium, dissolved	--	32.97694	22.5	22.5	63.3			
03/23/92	Magnesium, dissolved	--	32.97694	28.6	28.1	62.2			
09/30/92	Magnesium, dissolved	--	32.97694	NT	NT	NT			
03/05/93	Magnesium, dissolved	--	32.97694	NT	NT	NT			
09/21/93	Magnesium, dissolved	--	32.97694	NT	NT	NT			
03/23/94	Magnesium, dissolved	--	32.97694	NT	NT	NT			
09/16/94	Magnesium, dissolved	--	32.97694	NT	NT	NT			
03/16/95	Magnesium, dissolved	--	32.97694	NT	NT	NT			
09/13/95	Magnesium, dissolved	--	32.97694	NT	NT	NT			
03/28/96	Magnesium, dissolved	--	32.97694	NT	NT	NT			
06/20/96	Magnesium, dissolved	--	32.97694	NT	NT	NT			
09/13/96	Magnesium, dissolved	--	32.97694	NT	NT	DRY			
03/19/97	Magnesium, dissolved	--	32.97694	NT	NT	DRY			
06/18/97	Magnesium, dissolved	--	32.97694	NT	NT	NT			
08/30/97	Magnesium, dissolved	--	32.97694	NT	NT	DRY			
03/10/98	Magnesium, dissolved	--	32.97694	NT	NT	DRY			
09/21/98	Magnesium, dissolved	--	32.97694	NT	NT	DRY			
03/18/99	Magnesium, dissolved	--	32.97694	NT	NT	DRY			
09/21/99	Magnesium, dissolved	--	32.97694	NT	NT	DRY			
03/21/2000	Magnesium, dissolved	--	32.97694	NT	NT	DRY			
06/28/2000	Magnesium, dissolved	--	32.97694	NT	NT	DRY	48.3	DRY	64
09/28/2000	Magnesium, dissolved	--	32.97694	NT	NT	DRY	DRY	DRY	67.5
12/27/2000	Magnesium, dissolved	--	32.97694	NT	NT	NT	DRY	DRY	65.7
03/28/2001	Magnesium, dissolved	--	32.97694	NT	NT	DRY	8.2	DRY	DRY
09/02/2001	Magnesium, dissolved	--	32.97694	NT	NT	NT	NT	DRY	DRY
03/19/2002	Magnesium, dissolved	--	32.97694	NT	NT	NT	13.2	NT	62.6
10/07/2002	Magnesium, dissolved	--	32.97694	NT	NT	NT	105	25.3	NT
03/14/2003	Magnesium, dissolved	--	32.97694	NT	NT	DRY	NT	12	NT
09/29/2003	Magnesium, dissolved	--	32.97694	NT	NT	DRY	DRY	DRY	NT
03/08/2004	Magnesium, dissolved	--	32.97694	NT	NT	DRY	NT	24.6	NT
09/27/2004	Magnesium, dissolved	--	32.97694	NT	NT	DRY	DRY	DRY	NT

Mean	26.525	26.65	60.075	43.675	20.63333	64.95
Standard Deviation (STD)	3.225969	3.344772	2.717881	38.63078	6.111374	1.836437
Mean + 2 STD	32.97694	33.33954	65.51076	120.9366	32.85608	68.62287



AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

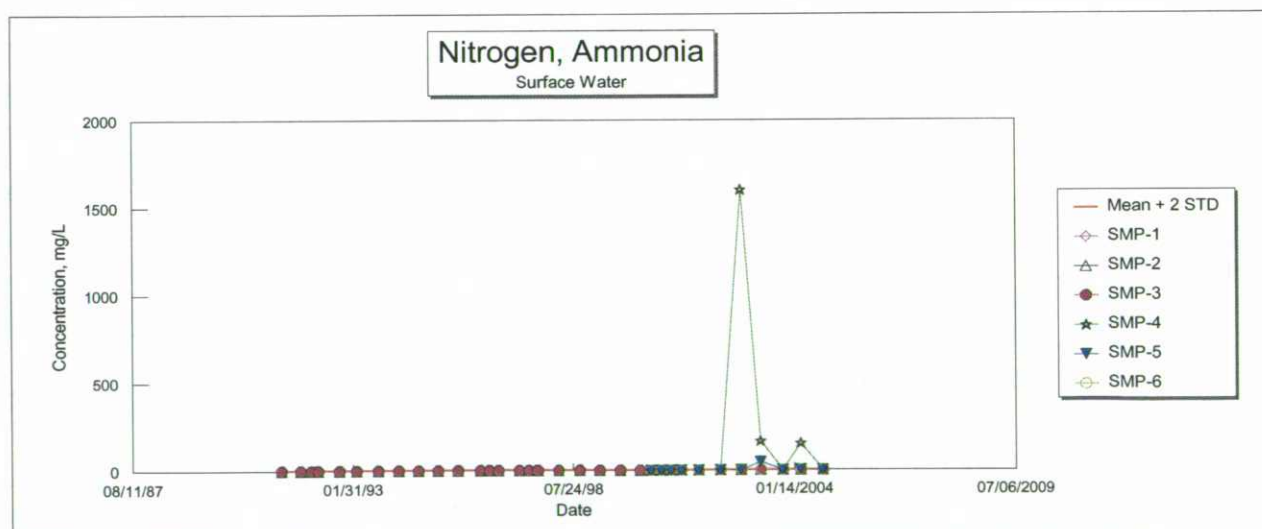
DATE	PARAMETER mg/L	ACTION LEVEL	MEAN + 2 STD SW	SURFACE MONITORING PTS.					
				SW 1	SW 2	SW 3	SW 4	Sw 5	SW 6
04/23/91	Mercury, dissolved	0.002	0.0005	<0.001	<0.001	<0.001			
10/15/91	Mercury, dissolved	0.002	0.0005	<0.0005	<0.0005	<0.0005			
01/23/92	Mercury, dissolved	0.002	0.0005	<0.0005	<0.0005	<0.0005			
03/23/92	Mercury, dissolved	0.002	0.0005	<0.0005	<0.0005	<0.0005			
09/30/92	Mercury, dissolved	0.002	0.0005	NT	NT	NT			
03/05/93	Mercury, dissolved	0.002	0.0005	NT	NT	NT			
09/21/93	Mercury, dissolved	0.002	0.0005	NT	NT	NT			
03/23/94	Mercury, dissolved	0.002	0.0005	NT	NT	NT			
09/16/94	Mercury, dissolved	0.002	0.0005	NT	NT	NT			
03/16/95	Mercury, dissolved	0.002	0.0005	NT	NT	NT			
09/13/95	Mercury, dissolved	0.002	0.0005	NT	NT	NT			
03/28/96	Mercury, dissolved	0.002	0.0005	NT	NT	NT			
06/20/96	Mercury, dissolved	0.002	0.0005	NT	NT	NT			
09/13/96	Mercury, dissolved	0.002	0.0005	NT	NT	DRY			
03/19/97	Mercury, dissolved	0.002	0.0005	NT	NT	DRY			
06/18/97	Mercury, dissolved	0.002	0.0005	NT	NT	NT			
08/30/97	Mercury, dissolved	0.002	0.0005	NT	NT	DRY			
03/10/98	Mercury, dissolved	0.002	0.0005	NT	NT	DRY			
09/21/98	Mercury, dissolved	0.002	0.0005	NT	NT	DRY			
03/18/99	Mercury, dissolved	0.002	0.0005	NT	NT	DRY			
09/21/99	Mercury, dissolved	0.002	0.0005	NT	NT	DRY			
03/28/2000	Mercury, dissolved	0.002	0.0005	NT	NT	DRY			
06/28/2000	Mercury, dissolved	0.002	0.0005	NT	NT	DRY	<0.0005	DRY	<0.0005
09/28/2000	Mercury, dissolved	0.002	0.0005	NT	NT	DRY	DRY	DRY	<0.0005
12/27/2000	Mercury, dissolved	0.002	0.0005	NT	NT	NT	DRY	DRY	<0.0005
03/28/2001	Mercury, dissolved	0.002	0.0005	NT	NT	Dry	<0.0005	DRY	DRY
09/02/2001	Mercury, dissolved	0.002	0.0005	NT	NT	NT	NT	DRY	DRY
03/19/2002	Mercury, dissolved	0.002	0.0005	NT	NT	NT	<0.0005	NT	<0.0005
10/07/2002	Mercury, dissolved	0.002	0.0005	NT	NT	NT	<0.0005	<0.0005	NT
03/14/2003	Mercury, dissolved	0.002	0.0005	NT	NT	DRY	NT	<0.005	NT
09/29/2003	Mercury, dissolved	0.002	0.0005	NT	NT	DRY	DRY	DRY	NT
03/08/2004	Mercury, dissolved	0.002	0.0005	NT	NT	DRY	NT	<0.0005	NT
09/27/2004	Mercury, dissolved	0.002	0.0005	NT	NT	DRY	DRY	DRY	NT
Mean				ERR	ERR	ERR	ERR	ERR	ERR
Standard Deviation (STD)				ERR	ERR	ERR	ERR	ERR	ERR
Mean + 2 STD				ERR	ERR	ERR	ERR	ERR	ERR

AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER mg/L	ACTION LEVEL	MEAN + 2 STD SW	SURFACE MONITORING PTS.					
				SW 1	SW 2	SW 3	SW 4	SW 5	SW 6
04/23/91	Nitrogen, Ammonia	--	1	<0.5	<0.5	<0.5			
10/15/91	Nitrogen, Ammonia	--	1	<0.5	<0.5	<0.5			
01/23/92	Nitrogen, Ammonia	--	1	<1.0	<1.0	<1.0			
03/23/92	Nitrogen, Ammonia	--	1	<1.0	<1.0	<1.0			
09/30/92	Nitrogen, Ammonia	--	1	<1	<1	DRY			
03/05/93	Nitrogen, Ammonia	--	1	<1	<1	DRY			
09/21/93	Nitrogen, Ammonia	--	1	<1	<1	<1			
03/23/94	Nitrogen, Ammonia	--	1	<1	<1	<1			
09/16/94	Nitrogen, Ammonia	--	1	<1	<1	NT			
03/16/95	Nitrogen, Ammonia	--	1	<1	NT	NT			
09/13/95	Nitrogen, Ammonia	--	1	<1	<1	NT			
03/28/96	Nitrogen, Ammonia	--	1	<1	<1	NT			
06/20/96	Nitrogen, Ammonia	--	1	NT	NT	NT			
09/13/96	Nitrogen, Ammonia	--	1	<1	<1	DRY			
03/19/97	Nitrogen, Ammonia	--	1	<1	<1	DRY			
06/18/97	Nitrogen, Ammonia	--	1	NT	NT	NT			
08/30/97	Nitrogen, Ammonia	--	1	<1	<1	DRY			
03/10/98	Nitrogen, Ammonia	--	1	<1	<1	DRY			
09/21/98	Nitrogen, Ammonia	--	1	<1	<1	DRY			
03/18/99	Nitrogen, Ammonia	--	1	<1	<1	DRY			
09/21/99	Nitrogen, Ammonia	--	1	<1	<1	DRY			
03/21/2000	Nitrogen, Ammonia	--	1	<1	<1	DRY			
06/28/2000	Nitrogen, Ammonia	--	1	NT	NT	DRY	<1	DRY	<1
09/28/2000	Nitrogen, Ammonia	--	1	<1	<1	DRY	DRY	DRY	<1
12/27/2000	Nitrogen, Ammonia	--	1	NT	NT	NT	DRY	DRY	<1
03/28/2001	Nitrogen, Ammonia	--	1	<1	<1	DRY	<1	DRY	DRY
09/02/2001	Nitrogen, Ammonia	--	1	<1	<1	DRY	NT	DRY	DRY
03/19/2002	Nitrogen, Ammonia	--	1	<1	<1	DRY	<1	DRY	<1
10/07/2002	Nitrogen, Ammonia	--	1	<1	<1	DRY	1600	<1	1.3
03/14/2003	Nitrogen, Ammonia	--	1	<1	<1	DRY	164	44.8	<1
09/29/2003	Nitrogen, Ammonia	--	1	<1.0	<1.0	DRY	DRY	DRY	<1.0
03/08/2004	Nitrogen, Ammonia	--	1	<1.0	<1.0	DRY	151	1.7	1.1
09/27/2004	Nitrogen, Ammonia	--	1	<1.0	<1.0	DRY	DRY	DRY	1

Mean	ERR	ERR	ERR	638.3333	23.25	1.133333
Standard Deviation (STD)	ERR	ERR	ERR	680.0217	21.55	0.124722
Mean + 2 STD	ERR	ERR	ERR	1998.377	66.35	1.382777

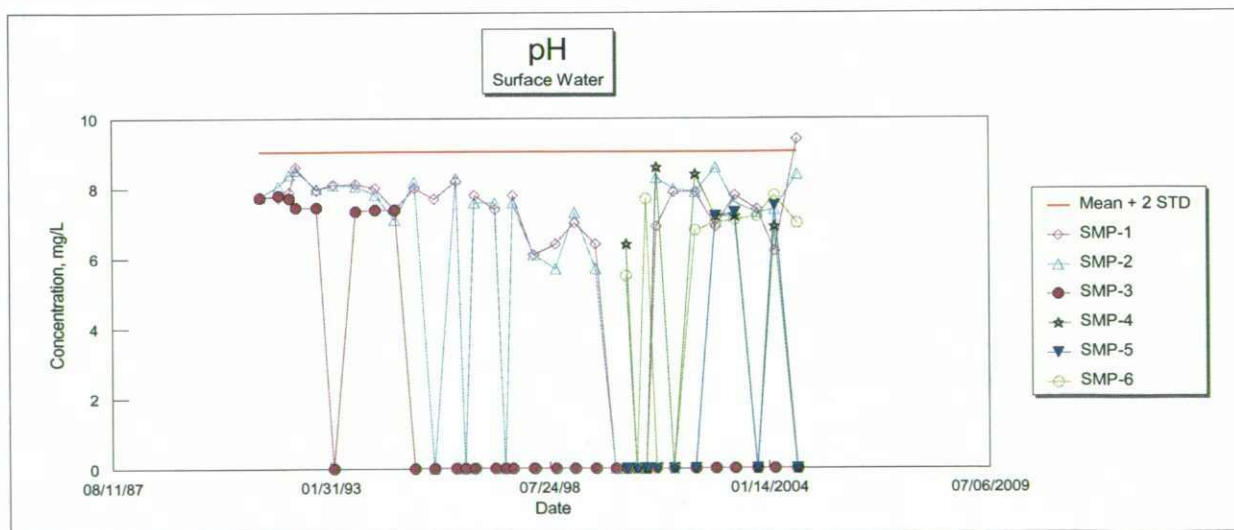


AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD SW	SURFACE MONITORING PTS.					
				SW 1	SW 2	SW 3	Sw 4	SW 5	Sw 6
04/23/91	pH	--	9.053145	7.76	7.77	7.73			
10/15/91	pH	--	9.053145	7.74	8.08	7.80			
01/23/92	pH	--	9.053145	7.89	8.41	7.72			
03/23/92	pH	--	9.053145	8.60	8.54	7.45			
09/30/92	pH	--	9.053145	7.95	8	7.45			
03/05/93	pH	--	9.053145	8.11	8.11	DRY			
09/21/93	pH	--	9.053145	8.12	8.07	7.34			
03/23/94	pH	--	9.053145	8.01	7.83	7.39			
09/16/94	pH	--	9.053145	7.39	7.11	7.39			
03/16/95	pH	--	9.053145	8	8.2	DRY			
09/13/95	pH	--	9.053145	7.7	DRY	DRY			
03/28/96	pH	--	9.053145	8.2	8.3	Dry			
06/20/96	pH	--	9.053145	NT	NT	NT			
09/13/96	pH	--	9.053145	7.8	7.6	DRY			
03/19/97	pH	--	9.053145	7.4	7.6	DRY			
06/18/97	pH	--	9.053145	NT	NT	NT			
08/30/97	pH	--	9.053145	7.8	7.6	DRY			
03/10/98	pH	--	9.053145	6.1	6.1	DRY			
09/21/98	pH	--	9.053145	6.4	5.7	DRY			
03/18/99	pH	--	9.053145	7	7.3	DRY			
09/21/99	pH	--	9.053145	6.4	5.7	DRY			
03/21/2000	pH	--	9.053145	NT	NT	DRY			
06/28/2000	pH	--	9.053145	NT	NT	DRY	6.4	DRY	5.5
09/28/2000	pH	--	9.053145	NT	NT	DRY	NT	NT	NT
12/27/2000	pH	--	9.053145	NT	NT	NT	DRY	DRY	7.7
03/28/2001	pH	--	9.053145	6.9	8.3	DRY	8.6	DRY	DRY
09/02/2001	pH	--	9.053145	7.9	8	DRY	NT	DRY	DRY
03/19/2002	pH	--	9.053145	7.9	7.9	DRY	8.4	DRY	6.8
10/07/2002	pH	--	9.053145	6.9	8.6	DRY	7.2	7.2	7
03/14/2003	pH	--	9.053145	7.8	7.6	DRY	7.2	7.3	7.1
09/29/2003	pH	--	9.053145	7.4	7.3	DRY	DRY	DRY	7.2
03/08/2004	pH	--	9.053145	6.2	7.4	DRY	6.9	7.5	7.8
09/27/2004	pH	--	9.053145	9.4	8.4	DRY	DRY	DRY	7

Mean	7.584074	7.673846	7.53375	7.45	7.333333	7.0125
Standard Deviation (STD)	0.734536	0.772389	0.172115	0.791096	0.124722	0.658478
Mean + 2 STD	9.053145	9.218625	7.877979	9.032193	7.582777	8.329457



AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

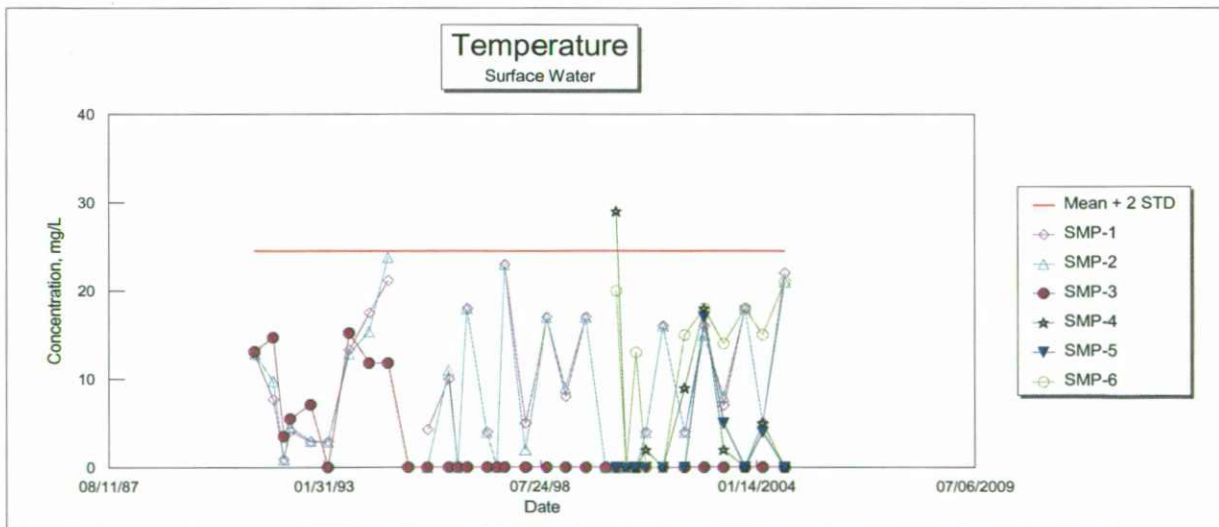
DATE	PARAMETER mg/L	ACTION LEVEL	MEAN + 2 STD SW	SURFACE MONITORING PTS.					
				SW 1	SW 2	SW 3	SW 4	SW 5	SW 6
04/23/91	Phenols	--	0.1	<0.100	<0.100	<0.100			
10/15/91	Phenols	--	0.1	<0.100	<0.100	<0.100			
01/23/92	Phenols	--	0.1	<0.100	<0.100	<0.100			
03/23/92	Phenols	--	0.1	<0.100	<0.100	<0.100			
09/30/92	Phenols	--	0.1	<0.100	<0.100	DRY			
03/05/93	Phenols	--	0.1	NT	NT	NT			
09/21/93	Phenols	--	0.1	<0.100	<0.100	<0.100			
03/23/94	Phenols	--	0.1	NT	NT	NT			
09/16/94	Phenols	--	0.1	<0.100	<0.100	NT			
03/16/95	Phenols	--	0.1	<0.100	NT	NT			
09/13/95	Phenols	--	0.1	NT	NT	NT			
03/28/96	Phenols	--	0.1	NT	NT	NT			
06/20/96	Phenols	--	0.1	NT	NT	NT			
09/13/96	Phenols	--	0.1	<0.100	<0.100	DRY			
03/19/97	Phenols	--	0.1	NT	NT	NT			
06/18/97	Phenols	--	0.1	NT	NT	NT			
08/30/97	Phenols	--	0.1	<0.100	<0.100	DRY			
03/10/98	Phenols	--	0.1	NT	NT	NT			
09/21/98	Phenols	--	0.1	<0.100	<0.100	DRY			
03/18/99	Phenols	--	0.1	NT	NT	DRY			
09/21/99	Phenols	--	0.1	<0.100	<0.100	DRY			
03/21/2000	Phenols	--	0.1	NT	NT	DRY			
06/28/2000	Phenols	--	0.1	NT	NT	DRY	NT	NT	NT
09/28/2000	Phenols	--	0.1	<0.100	<0.100	DRY	DRY	DRY	<0.100
12/27/2000	Phenols	--	0.1	NT	NT	NT	DRY	DRY	NT
03/28/2001	Phenols	--	0.1	NT	NT	NT	NT	DRY	Dry
09/02/2001	Phenols	--	0.1	<0.100	<0.100	DRY	NT	DRY	Dry
03/19/2002	Phenols	--	0.1	NT	NT	NT	NT	NT	NT
10/07/2002	Phenols	--	0.1	<0.100	<0.100	DRY	<0.100	<0.100	<0.100
03/14/2003	Phenols	--	0.1	NT	NT	DRY	NT	NT	NT
09/29/2003	Phenols	--	0.1	<0.100	<0.100	DRY	DRY	DRY	<0.100
03/08/2004	Phenols	--	NT	NT	NT	DRY	NT	NT	NT
09/27/2004	Phenols	--	0.1	<0.100	<0.100	DRY	DRY	DRY	<0.100
Mean				ERR	ERR	ERR	ERR	ERR	ERR
Standard Deviation (STD)				ERR	ERR	ERR	ERR	ERR	ERR
Mean + 2 STD				ERR	ERR	ERR	ERR	ERR	ERR

AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD SW	SURFACE MONITORING PTS.					
				SW 1	SW 2	SW 3	SW 4	SW 5	SW 6
04/23/91	Temperature, celsius	--	24.53546	12.8	12.9	13.1			
10/15/91	Temperature, celsius	--	24.53546	7.7	9.8	14.7			
01/23/92	Temperature, celsius	--	24.53546	0.9	0.9	3.5			
03/23/92	Temperature, celsius	--	24.53546	4.1	4.6	5.5			
09/30/92	Temperature, celsius	--	24.53546	2.9	3	7.1			
03/05/93	Temperature, celsius	--	24.53546	2.9	2.9	DRY			
09/21/93	Temperature, celsius	--	24.53546	13.3	12.9	15.2			
03/23/94	Temperature, celsius	--	24.53546	17.5	15.4	11.8			
09/16/94	Temperature, celsius	--	24.53546	21.2	23.8	11.8			
03/16/95	Temperature, celsius	--	24.53546			DRY			
09/13/95	Temperature, celsius	--	24.53546	4.28	DRY	DRY			
03/28/96	Temperature, celsius	--	24.53546	10	11	DRY			
06/20/96	Temperature, celsius	--	24.53546	NT	NT	NT			
09/13/96	Temperature, celsius	--	24.53546	18	18	Dry			
03/19/97	Temperature, celsius	--	24.53546	4	4	DRY			
06/18/97	Temperature, celsius	--	24.53546	NT	NT	NT			
08/30/97	Temperature, celsius	--	24.53546	23	23	DRY			
03/10/98	Temperature, celsius	--	24.53546	5	2	DRY			
09/21/98	Temperature, celsius	--	24.53546	17	17	DRY			
03/18/99	Temperature, celsius	--	24.53546	8	9	DRY			
09/21/99	Temperature, celsius	--	24.53546	17	17	DRY			
03/21/2000	Temperature, celsius	--	24.53546	NT	NT	DRY			
06/28/2000	Temperature, celsius	--	24.53546	NT	NT	DRY	29	DRY	20
09/28/2000	Temperature, celsius	--	24.53546	NT	NT	DRY	NT	NT	NT
12/27/2000	Temperature, celsius	--	24.53546	NT	NT	NT	DRY	DRY	13
03/28/2001	Temperature, celsius	--	24.53546	4	4	DRY	2	DRY	Dry
09/02/2001	Temperature, celsius	--	24.53546	16	16	DRY	NT	DRY	Dry
03/19/2002	Temperature, celsius	--	24.53546	4	4	DRY	9	DRY	15
10/07/2002	Temperature, celsius	--	24.53546	16	15	DRY	18	17	18
03/14/2003	Temperature, celsius	--	24.53546	7	8	DRY	2	5	14
09/29/2003	Temperature, celsius	--	24.53546	18	18	DRY	DRY	DRY	18
03/08/2004	Temperature, celsius	--	24.53546	5	5	DRY	5	4	15
09/27/2004	Temperature, celsius	--	24.53546	22	21	DRY	DRY	DRY	21

Mean	10.83	11.128	10.3375	10.83333	8.666667	16.75
Standard Deviation (STD)	6.852728	6.916734	4.111246	9.788031	5.906682	2.727178
Mean + 2 STD	24.53546	24.96147	18.55999	30.4094	20.48003	22.20436

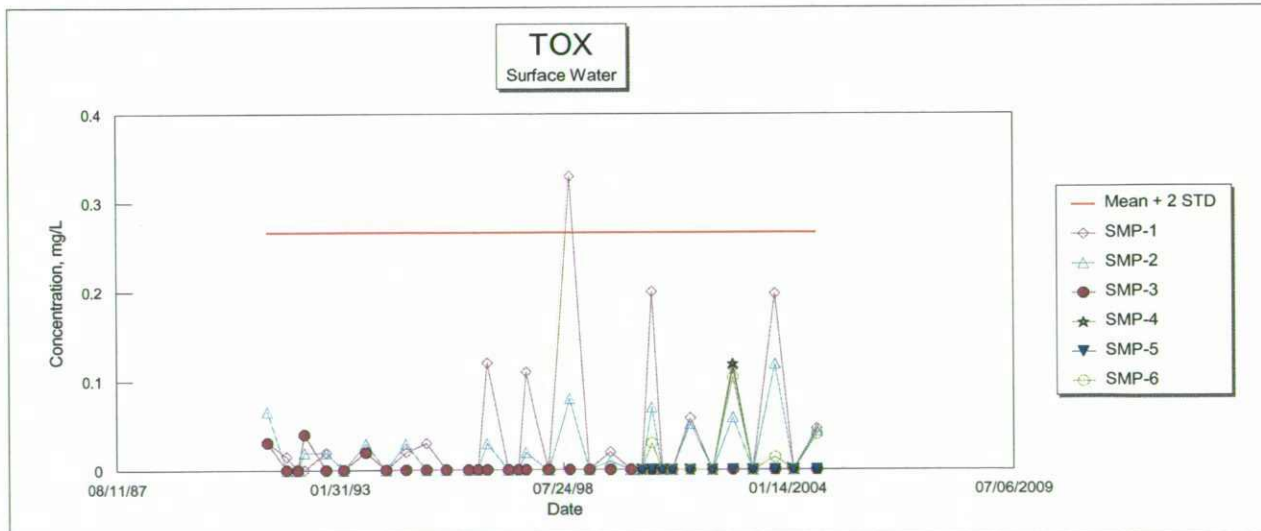


AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD SW	SURFACE MONITORING PTS.					
				SW 1	SW 2	SW 3	SW 4	SW 5	SW 6
	mg/L								
04/23/91	Total Organic Halogens	--	0.266552	0.031	0.066	0.031			
10/15/91	Total Organic Halogens	--	0.266552	0.015	<0.01	<0.01			
01/23/92	Total Organic Halogens	--	0.266552	<0.01	<0.01	<0.01			
03/23/92	Total Organic Halogens	--	0.266552	<0.01	0.02	0.04			
09/30/92	Total Organic Halogens	--	0.266552	0.02	0.02	DRY			
03/05/93	Total Organic Halogens	--	0.266552	NT	NT	NT			
09/21/93	Total Organic Halogens	--	0.266552	0.02	0.03	0.02			
03/23/94	Total Organic Halogens	--	0.266552	NT	NT	NT			
09/16/94	Total Organic Halogens	--	0.266552	0.02	0.03	NT			
03/16/95	Total Organic Halogens	--	0.266552	0.03	NT	NT			
09/13/95	Total Organic Halogens	--	0.266552	NT	NT	NT			
03/28/96	Total Organic Halogens	--	0.266552	NT	NT	NT			
06/20/96	Total Organic Halogens	--	0.266552	NT	NT	NT			
09/13/96	Total Organic Halogens	--	0.266552	0.12	0.03	DRY			
03/19/97	Total Organic Halogens	--	0.266552	NT	NT	NT			
06/18/97	Total Organic Halogens	--	0.266552	NT	NT	NT			
08/30/97	Total Organic Halogens	--	0.266552	0.11	0.02	DRY			
03/10/98	Total Organic Halogens	--	0.266552	NT	NT	NT			
09/21/98	Total Organic Halogens	--	0.266552	0.33	0.08	DRY			
03/18/99	Total Organic Halogens	--	0.266552	NT	NT	DRY			
09/21/99	Total Organic Halogens	--	0.266552	0.02	0.01	DRY			
03/21/2000	Total Organic Halogens	--	0.266552	NT	NT	DRY			
06/28/2000	Total Organic Halogens	--	0.266552	NT	NT	DRY	NT	DRY	NT
09/28/2000	Total Organic Halogens	--	0.266552	0.2	0.07	DRY	DRY	DRY	0.03
12/27/2000	Total Organic Halogens	--	0.266552	NT	NT	NT	DRY	DRY	NT
03/28/2001	Total Organic Halogens	--	0.266552	NT	NT	NT	NT	DRY	Dry
09/02/2001	Total Organic Halogens	--	0.266552	0.058	0.052	DRY	NT	DRY	Dry
03/19/2002	Total Organic Halogens	--	0.266552	NT	NT	NT	NT	NT	NT
10/07/2002	Total Organic Halogens	--	0.266552	0.114	0.059	DRY	0.119	<0.01	0.104
03/14/2003	Total Organic Halogens	--	0.266552	NT	NT	DRY	NT	NT	NT
09/29/2003	Total Organic Halogens	--	0.266552	0.198	0.119	DRY	Dry	Dry	0.014
03/08/2004	Total Organic Halogens	--	0.266552	NT	NT	DRY	NT	NT	NT
09/27/2004	Total Organic Halogens	--	0.266552	0.046	0.044	DRY	DRY	DRY	0.04

Mean	0.0888	0.046429	0.030333	0.119	ERR	0.047
Standard Deviation (STD)	0.088876	0.028982	0.008179	0	ERR	0.034191
Mean + 2 STD	0.266552	0.104393	0.04669	0.119	ERR	0.115381



AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER	ACTION LEVEL	MEAN + 2 STD SW	SURFACE MONITORING PTS.					
				SW 1	SW 2	SW 3	SW 4	SW 5	SW 6
	ug/L								
04/23/91	Trichloroethene *	5	1	<1	<1	<1			
10/15/91	Trichloroethene *	5	1	<1	<1	<1			
01/23/92	Trichloroethene *	5	1	<1	<1	<1			
03/23/92	Trichloroethene *	5	1	<1	<1	<1			
09/30/92	Trichloroethene *	5	1	NT	NT	NT			
03/05/93	Trichloroethene *	5	1	NT	NT	NT			
09/21/93	Trichloroethene *	5	1	NT	NT	NT			
03/23/94	Trichloroethene *	5	1	NT	NT	NT			
09/16/94	Trichloroethene *	5	1	NT	NT	NT			
03/16/95	Trichloroethene *	5	1	NT	NT	NT			
09/13/95	Trichloroethene *	5	1	NT	NT	NT			
03/28/96	Trichloroethene *	5	1	NT	NT	NT			
06/20/96	Trichloroethene *	5	1	NT	NT	NT			
09/13/96	Trichloroethene *	5	1	NT	NT	DRY			
03/19/97	Trichloroethene *	5	1	NT	NT	NT			
06/18/97	Trichloroethene *	5	1	NT	NT	NT			
08/30/97	Trichloroethene *	5	1	NT	NT	DRY			
03/10/98	Trichloroethene *	5	1	NT	NT	DRY			
09/21/98	Trichloroethene *	5	1	NT	NT	DRY			
03/18/99	Trichloroethene *	5	1	NT	NT	DRY			
09/21/99	Trichloroethene *	5	1	NT	NT	DRY			
03/21/2000	Trichloroethene *	5	1	NT	NT	DRY			
06/28/2000	Trichloroethene *	5	1	NT	NT	DRY	<1	DRY	<1
09/28/2000	Trichloroethene *	5	1	NT	NT	DRY	DRY	DRY	<1
12/27/2000	Trichloroethene *	5	1	NT	NT	NT	DRY	DRY	<1
03/28/2001	Trichloroethene *	5	1	NT	NT	DRY	<1	DRY	Dry
09/02/2001	Trichloroethene *	5	1	NT	NT	NT	NT	DRY	Dry
03/19/2002	Trichloroethene *	5	1	NT	NT	NT	<1	NT	<1
10/07/2002	Trichloroethene *	5	1	NT	NT	NT	<1	<1	NT
03/14/2003	Trichloroethene *	5	1	NT	NT	DRY	NT	<1	NT
09/29/2003	Trichloroethene *	5	1	NT	NT	DRY	DRY	DRY	NT
03/08/2004	Trichloroethene *	5	1	NT	NT	DRY	NT	<1	NT
09/27/2004	Trichloroethene *	5	1	NT	NT	DRY	DRY	DRY	NT
Mean				ERR	ERR	ERR	ERR	ERR	ERR
Standard Deviation (STD)				ERR	ERR	ERR	ERR	ERR	ERR
Mean + 2 STD				ERR	ERR	ERR	ERR	ERR	ERR

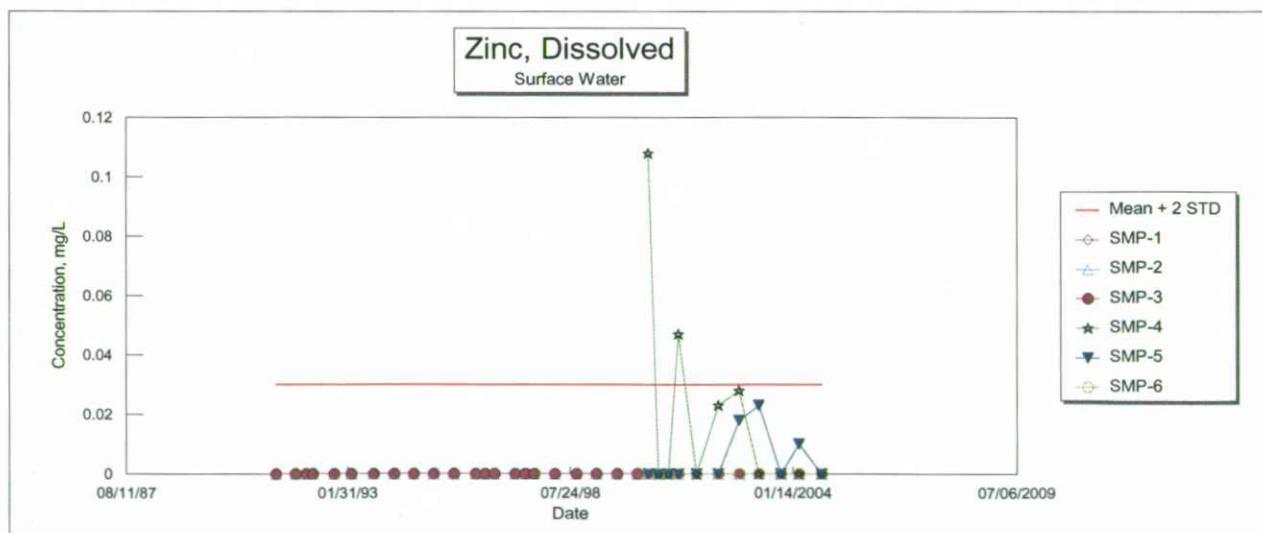
AMES-STORY ENVIRONMENTAL LANDFILL

MONITORING WELL SAMPLING RESULTS

DATE	PARAMETER mg/L	ACTION LEVEL	MEAN + 2 STD SW	SURFACE MONITORING PTS.					
				SW 1	SW 2	SW 3	SW 4	SW 5	SW 6
04/23/91	Zinc, dissolved	2	0.03	<0.03	<0.03	<0.03			
10/15/91	Zinc, dissolved	2	0.03	<0.03	<0.03	<0.03			
01/23/92	Zinc, dissolved	2	0.03	<0.03	<0.03	<0.03			
03/23/92	Zinc, dissolved	2	0.03	<0.03	<0.03	<0.03			
09/30/92	Zinc, dissolved	2	0.03	NT	NT	NT			
03/05/93	Zinc, dissolved	2	0.03	NT	NT	NT			
09/21/93	Zinc, dissolved	2	0.03	NT	NT	NT			
03/23/94	Zinc, dissolved	2	0.03	NT	NT	NT			
09/16/94	Zinc, dissolved	2	0.03	NT	NT	NT			
03/16/95	Zinc, dissolved	2	0.03	NT	NT	NT			
09/13/95	Zinc, dissolved	2	0.03	NT	NT	NT			
03/28/96	Zinc, dissolved	2	0.03	NT	NT	NT			
06/20/96	Zinc, dissolved	2	0.03	NT	NT	NT			
09/13/96	Zinc, dissolved	2	0.03	NT	NT	DRY			
03/19/97	Zinc, dissolved	2	0.03	NT	NT	DRY			
06/18/97	Zinc, dissolved	2	0.03	NT	NT	NT			
08/30/97	Zinc, dissolved	2	0.03	NT	NT	DRY			
03/10/98	Zinc, dissolved	2	0.03	NT	NT	DRY			
09/21/98	Zinc, dissolved	2	0.03	NT	NT	DRY			
03/18/99	Zinc, dissolved	2	0.03	NT	NT	DRY			
09/21/99	Zinc, dissolved	2	0.03	NT	NT	DRY			
03/21/2000	Zinc, dissolved	2	0.03	NT	NT	DRY			
06/28/2000	Zinc, dissolved	2	0.03	NT	NT	DRY	0.108	DRY	<0.03
09/28/2000	Zinc, dissolved	2	0.03	NT	NT	DRY	DRY	DRY	<0.03
12/27/2000	Zinc, dissolved	2	0.03	NT	NT	NT	DRY	Dry	<0.03
03/28/2001	Zinc, dissolved	2	0.03	NT	NT	DRY	0.047	Dry	Dry
09/02/2001	Zinc, dissolved	2	0.03	NT	NT	NT	NT	Dry	Dry
03/19/2002	Zinc, dissolved	2	0.03	NT	NT	NT	0.023	NT	<0.01
10/07/2002	Zinc, dissolved	2	0.03	NT	NT	NT	0.028	0.018	NT
03/14/2003	Zinc, dissolved	2	0.03	NT	NT	DRY	NT	0.023	NT
09/29/2003	Zinc, dissolved	2	0.03	NT	NT	DRY	DRY	DRY	NT
03/08/2004	Zinc, dissolved	2	0.03	NT	NT	DRY	NT	0.01	NT
09/27/2004	Zinc, dissolved	2	0.03	NT	NT	DRY	DRY	DRY	NT

Mean
Standard Deviation (STD)
Mean + 2 STD

ERR	ERR	ERR	0.0515	0.017	ERR
ERR	ERR	ERR	0.033827	0.005354	ERR
ERR	ERR	ERR	0.119154	0.027708	ERR



ATTACHMENT F
May 5, 1992 Semi-Annual Inspection Report

May 5, 1992

Nina Koger
Solid Waste Section - IDNR
Wallace State Office Building
900 E. Grand Ave.
Des Moines, Iowa 50319

RE: SEMI-ANNUAL INSPECTION
AMES/STORY ENVIRONMENTAL LANDFILL
IDNR PERMIT NO. 85-SDP-13-91P

Dear Mrs. Koger:

In accordance with the Special Provisions of the Permit, a semi-annual inspection of the Ames/Story Environmental Landfill was conducted by Scott Renaud, P.E., on April 29, 1992.

At the time of the inspection, a certified landfill operator was on duty along with an equipment operator. A tracked loader is being used to spread, compact, and cover C&D waste as per the Development Plan. All wastes have been covered except those received on this day. The site was well graded with no evidence of standing water. However, cover on the north slope is in need of repair due to erosion, and the siltation basin at the north end adjacent to the drainageway should be cleaned and reconstructed when weather conditions permit.

In addition to C&D wastes, the site is receiving a large quantity of bottom/fly ash from the City of Ames Electric Department which has been excavated from storage lagoons at the Municipal power plant. The working area was well managed and controlled; no windblown debris extended beyond the confines of the landfill. The access road is in good condition, however, the hard surface street extension and entrance have not yet been constructed as per the Development Plan and City requirements.

Top of landfill elevations in Trench No. 1 have now reached original ground surface elevation, and plans are being made for construction of Trench No. 2. All monitoring wells, monuments, and manholes for leachate collection are in good condition and operational. Landfill personnel are obtaining monthly measurements of leachate flow while CGA is obtaining monthly water level measurements in monitoring wells and quarterly water samples for testing.

Attached are copies of the test results for the fourth quarter sampling of the groundwater monitoring wells, aquifer monitoring wells, and surface water monitoring points. Test results for each quarter have been tabulated with respect to sampling point and parameter, and monthly water levels for groundwater and aquifer monitoring wells have been plotted on the attached graphs.

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Ames/Story Environmental Landfill**

Also enclosed are two (2), 5.25" floppy diskettes containing tabular and graphical presentation of monitoring data. The mean and standard deviation have been determined for each upgradient monitoring well and compared to corresponding downgradient monitoring wells.

You will find that in a number of instances, test results in the downgradient well do not fall within two standard deviations above the mean value. Most of these findings can be categorized as follows:

1. Initial background concentrations of certain parameters were higher in downgradient monitoring wells than in the corresponding upgradient monitoring well.
2. Changes in detection limits. Where test results were below detection levels, a value of $0.5 \times$ (detection level) was utilized in the computations. However, in some cases detection levels were increased (i.e., lead) which causes problems in the statistical analysis. In most of these cases, the concentrations were below detection levels for all four samples.
3. More recent tests results are less than previous levels. In most cases, an intermediate point is outside the statistical limit, but more recent results are within limits.
4. Increased levels in upgradient wells.

Test results which cannot be discounted for the reasons listed above are confined to MW's 25, 33 & 34 and SMP 3. All of these wells are located in the shallow alluvial sand and gravel formation along the drainageway at the north end of the site. A major interceptor sanitary sewer follows this drainageway which meanders through a heavily industrialized area of Ames. Since levels of various parameters in these downgradient wells exceeded levels in the corresponding upgradient well before waste was landfilled and have continued to increase, there is reason to suspect migration of these constituents from off-site and/or exfiltration from the sanitary sewer. The fact that levels of certain parameters in upgradient wells are increasing is also an indication of migration from off-site.

In accordance with IAC 567-103.2(6), this letter shall constitute notice to the IDNR that the analytical results for certain parameters in all downgradient monitoring wells do not fall within the control limits of two standard deviations above the mean parameter level in the corresponding up gradient well, and that the analytical results for certain parameters in all upgradient monitoring wells do not fall within two standard deviations of the mean parameter level for that monitoring well.

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Ames/Story Environmental Landfill**

In accordance with IAC 567-103.2(7) the IDNR is to determine if additional sampling and testing is necessary. No major violations of operating rules and regulations or deviations from the approved Development Plan were noted at this time.

If you have any questions or if additional information is needed, contact Scott Renaud or myself at the CGA-Ames office.

Respectfully submitted,
CLAPSADDLE-GARBER ASSOCIATES, INC.

Leslie S. Wolfe, P.E.

cc: Bill Fedeler, Ames/Story Environmental Landfill
Jack Clemons, Field Office 5

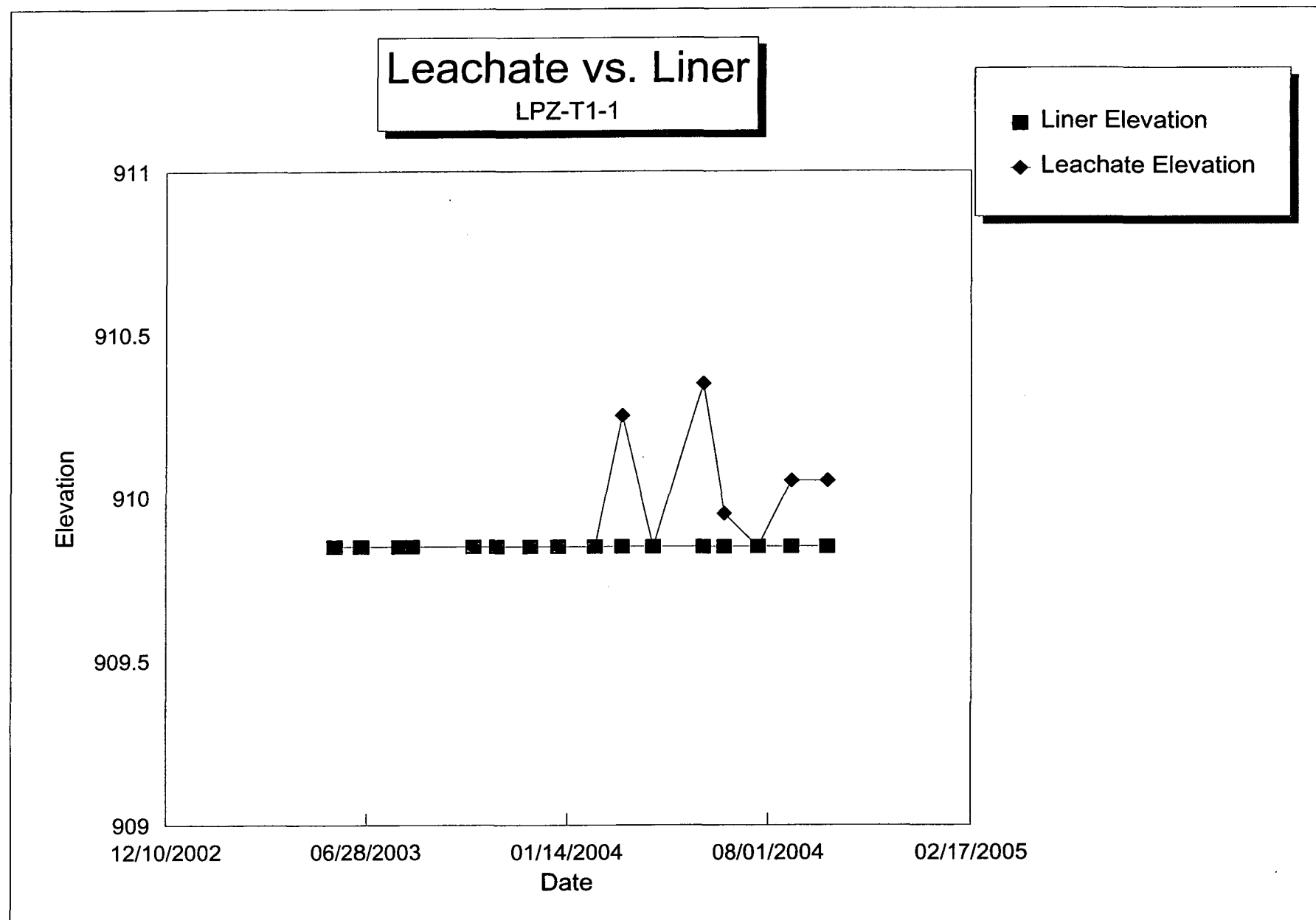
ATTACHMENT G
Water Elevation Data & Maps

AMES-STORY ENVIRONMENTAL LANDFILL 85-SDP-13-91P																										
MONTHLY WATER ELEVATIONS																										
GND.ELEV. FT.	MW.22	MW.23	MW.24	MW.25	MW.26	MW.27	MW.28	MW.29	MW.30	MW.31	MW.32	MW.33	MW.34	MW.35	MW.36	MW.37	MW38	MW.39	MW.40	MW.41	MW.42	MW.43	MW.6	MW.7	MW.8	
	950.59	945.98	939.44	906.34	950.51	950.51	946.02	945.61	945.54	941.43	939.86	906.32	909.50	916.19	948.97	949.49	936.59	935.93	933.07	933.46	940.64	940.83	942.88	943.21	942.76	
DATE																										
4/22/91	945.74	937.19	926.29	898.63	942.06	922.90	NT	NT	911.79	921.48	908.97	898.46	899.86	Installed 2/96	Installed 2/96	Installed 2/96										
5/21/91	945.69	937.11	926.23	898.55	942.04	922.84	NT	NT	911.71	921.39	908.91	898.42	899.82	Installed 2/96	Installed 2/96	Installed 2/96										
6/25/91	945.29	935.49	923.24	898.24	940.34	922.79	NT	NT	911.54	921.02	908.64	898.09	899.56	Installed 2/96	Installed 2/96	Installed 2/96										
7/05/91	943.99	932.56	919.36	897.92	937.48	922.32	NT	NT	911.39	920.40	908.40	897.80	899.42	Installed 2/96	Installed 2/96	Installed 2/96										
8/31/91	943.57	932.42	918.64	897.71	937.36	922.16	NT	NT	911.24	919.71	908.27	897.60	899.20	Installed 2/96	Installed 2/96	Installed 2/96										
10/14/91	941.37	925.81	916.88	896.97	930.24	919.15	NT	NT	908.69	918.13	906.67	896.82	898.77	Installed 2/96	Installed 2/96	Installed 2/96										
11/29/91	943.09	926.35	916.88	897.39	934.18	919.51	NT	NT	909.01	917.70	906.60	897.27	900.13	Installed 2/96	Installed 2/96	Installed 2/96										
12/31/91	942.78	927.64	916.88	897.03	935.01	919.78	NT	NT	909.29	917.17	906.56	896.90	900.86	Installed 2/96	Installed 2/96	Installed 2/96										
1/21/92	942.76	928.65	916.88	897.28	935.92	920.00	NT	NT	909.55	917.27	906.74	897.12	901.12	Installed 2/96	Installed 2/96	Installed 2/96										
2/17/92	941.97	929.13	916.88	897.29	935.72	920.07	NT	NT	909.69	917.11	906.76	897.16	901.00	Installed 2/96	Installed 2/96	Installed 2/96										
3/19/92	943.59	931.71	924.15	897.82	938.73	921.02	NT	NT	910.30	917.45	907.81	897.69	901.90	Installed 2/96	Installed 2/96	Installed 2/96										
4/22/92	943.89	932.55	926.15	898.47	939.22	921.60	NT	NT	910.65	919.94	908.46	898.35	903.04	Installed 2/96	Installed 2/96	Installed 2/96										
5/30/92	942.17	932.85	922.98	897.80	938.00	921.75	NT	NT	910.83	918.61	908.67	897.67	901.84	Installed 2/96	Installed 2/96	Installed 2/96										
6/30/92	941.55	930.26	919.03	897.63	937.00	921.19	NT	NT	910.08	918.59	908.11	897.50	900.85	Installed 2/96	Installed 2/96	Installed 2/96										
7/28/92	943.99	929.93	917.76	898.33	939.36	920.81	NT	NT	910.03	918.67	907.61	898.12	901.79	Installed 2/96	Installed 2/96	Installed 2/96										
8/22/92	943.21	930.42	919.53	897.84	938.92	920.65	NT	NT	910.24	918.34	907.63	897.71	901.25	Installed 2/96	Installed 2/96	Installed 2/96										
9/30/92	941.15	928.20	919.44	897.61	937.26	919.53	NT	NT	909.39	917.89	907.03	897.50	900.31	Installed 2/96	Installed 2/96	Installed 2/96										
10/29/92	940.26	927.12	916.88	897.54	936.15	919.48	NT	NT	908.88	917.65	906.74	897.42	899.50	Installed 2/96	Installed 2/96	Installed 2/96										
11/25/92	940.94	928.01	916.88	897.67	937.25	919.67	NT	NT	909.19	917.47	906.63	897.52	901.23	Installed 2/96	Installed 2/96	Installed 2/96										
12/10/92	941.21	928.23	916.88	897.41	936.84	919.77	NT	NT	909.31	917.60	906.74	897.33	900.94	Installed 2/96	Installed 2/96	Installed 2/96										
1/30/93	941.33	928.29	916.88	897.39	936.76	919.88	NT	NT	909.37	917.64	906.85	897.31	900.89	Installed 2/96	Installed 2/96	Installed 2/96										
2/22/93	939.55	929.28	916.88	897.22	935.16	919.23	NT	NT	909.64	917.46	906.70	897.06	901.13	Installed 2/96	Installed 2/96	Installed 2/96										
3/4/93	939.45	929.24	916.88	897.58	934.93	919.15	939.32	934.81	909.50	917.47	906.66	897.42	901.96	Installed 2/96	Installed 2/96	Installed 2/96										
4/27/93	941.79	936.40	927.66	897.84	939.11	920.27	940.68	937.01	911.30	921.03	906.66	897.68	902.76	Installed 2/96	Installed 2/96	Installed 2/96										
5/27/93	942.32	935.88	928.16	898.20	938.67	920.71	941.12	936.61	911.64	924.19	906.76	898.06	903.30	Installed 2/96	Installed 2/96	Installed 2/96										
6/30/93	942.37	935.34	927.10	898.40	938.11	920.94	941.12	936.51	911.84	924.63	909.96	898.28	902.90	Installed 2/96	Installed 2/96	Installed 2/96										
7/27/93	942.65	936.74	928.60	897.80	938.25	921.13	940.98	937.41	912.34	925.57	911.08	897.72	903.00	Installed 2/96	Installed 2/96	Installed 2/96										
8/26/93	942.57	936.50	928.04	897.66	937.71	920.91	941.22	937.71	912.44	927.58	910.06	897.52	902.66	Installed 2/96	Installed 2/96	Installed 2/96										
9/21/93	941.84	934.38	925.01	897.32	936.79	920.67	940.82	937.41	912.40	923.05	909.56	897.40	901.78	Installed 2/96	Installed 2/96	Installed 2/96										
10/25/93	941.45	934.13	924.40	897.29	936.16	920.21	940.07	936.26	912.24	923.88	909.36	897.16	901.45	Installed 2/96	Installed 2/96	Installed 2/96										
11/22/93	940.39	933.26	923.10	897.08	935.15	919.61	938.82	935.05	911.40	921.63	908.86	896.96	901.38	Installed 2/96	Installed 2/96	Installed 2/96										
12/14/93	939.69	932.68	921.90	897.00	934.55	919.47	938.54	934.45	911.12	921.09	906.62	896.84	901.28	Installed 2/96	Installed 2/96	Installed 2/96										
1/31/94	938.63	931.80	920.26	896.79	933.53	918.51	937.12	933.07	910.32	919.87	907.86	896.72	900.97	Installed 2/96	Installed 2/96	Installed 2/96										
2/28/94	938.16	933.61	922.39	896.91	NT	918.21	937.68	933.56	910.27	923.10	907.90	896.79	901.66	Installed 2/96	Installed 2/96	Installed 2/96										
3/16/94	938.79	934.94	923.90	897.04	932.73	918.39	938.46	934.13	910.94	926.53	908.50	896.92	902.05	Installed 2/96	Installed 2/96	Installed 2/96										
4/30/94	938.79	933.28	922.40	897.04	932.59	916.56	936.37	933.73	910.34	923.26	908.80	896.90	901.02	Installed 2/96	Installed 2/96	Installed 2/96										
5/17/94	939.09	933.74	922.68	896.98	931.65	915.45	938.52	933.75	910.54	924.47	908.54	896.82	NT	Installed 2/96	Installed 2/96	Installed 2/96										
7/31/94	NT	931.38	918.76	897.23	931.62	916.31	939.13	933.41	909.82	919.63	907.45	897.11	901.98	Installed 2/96	Installed 2/96	Installed 2/96										

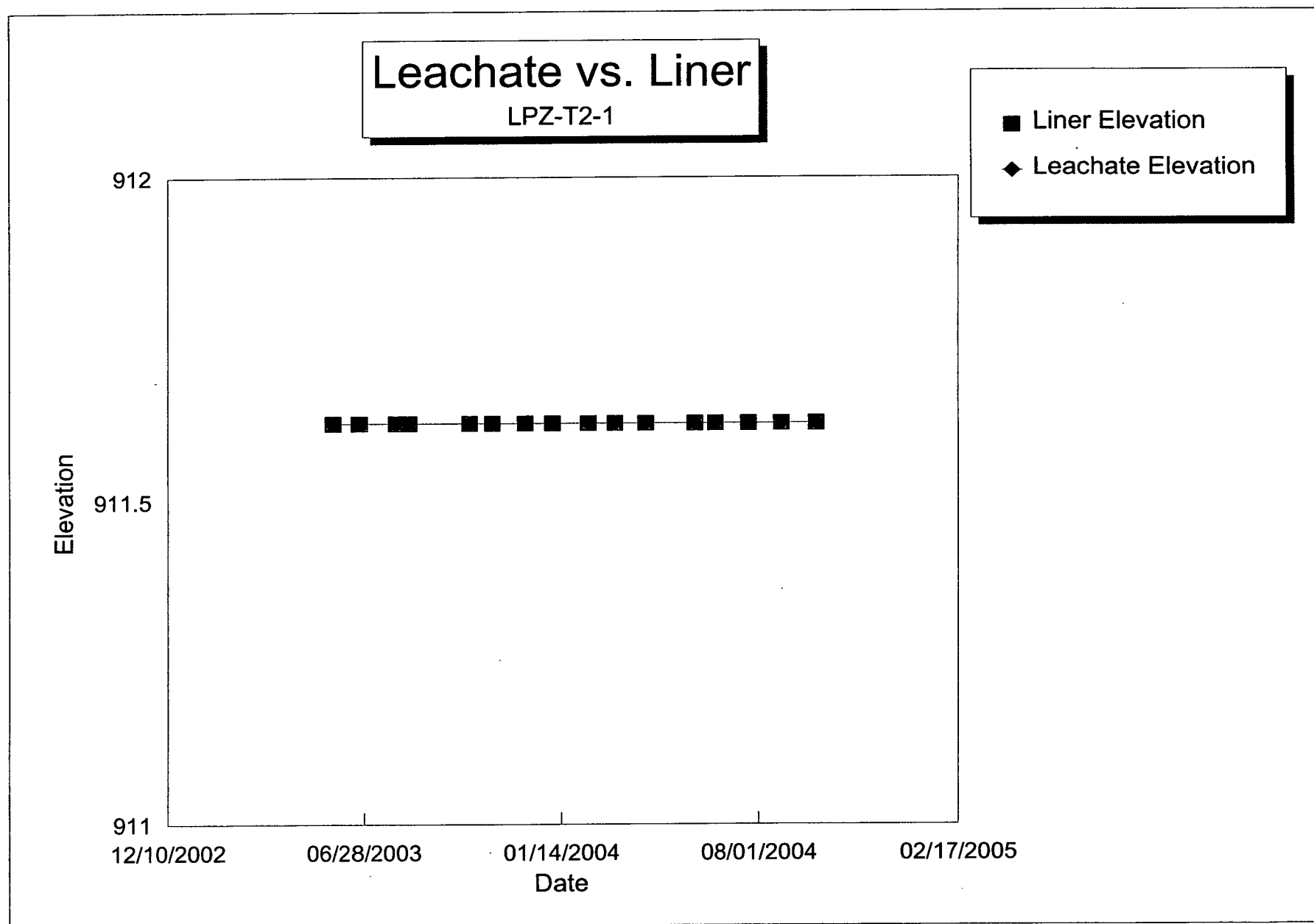
	MW 22	MW 23	MW 24	MW 25	MW 26	MW 27	MW28	MW29	MW 30	MW 31	MW 32	MW 33	MW 34	MW 35	MW 36	MW 37	MW38	MW 39	MW 40	MW 41	MW 42	MW 43	MW 6	MW 7	MW 8
TOP PVC ELEV.	950.59	945.98	939.44	906.34	950.51	950.51	946.02	945.61	945.54	941.43	939.86	906.32	909.50	916.19	948.97	949.49	936.59	935.93	933.07	933.46	940.64	940.83	942.86	943.21	942.76
DATE																									
4/22/91	4.85	8.79	13.15	7.71	8.45	27.61	NT	NT	33.75	19.95	30.89	7.86	9.64	NT	NT	NT									
5/21/91	4.90	8.87	13.21	7.79	8.47	27.67	NT	NT	33.83	20.04	30.95	7.90	9.68	NT	NT	NT									
6/25/91	5.30	10.49	16.20	8.10	10.17	27.72	NT	NT	34.00	20.41	31.22	8.23	9.94	NT	NT	NT									
7/05/91	6.60	13.42	20.08	8.42	13.03	28.19	NT	NT	34.15	21.03	31.46	8.52	10.08	NT	NT	NT									
8/31/91	7.02	13.56	20.80	8.63	13.15	28.35	NT	NT	34.30	21.72	31.59	8.72	10.30	NT	NT	NT									
9/10/91	7.91	16.01	22.56	8.80	15.92	29.60	NT	NT	35.50	22.10	32.21	8.95	10.52	NT	NT	NT									
10/14/91	9.22	20.17	22.56	9.37	20.27	31.36	NT	NT	36.85	23.30	33.19	9.50	10.73	NT	NT	NT									
11/29/91	7.50	19.63	22.56	8.95	16.33	31.00	NT	NT	36.53	23.73	33.26	9.05	9.37	NT	NT	NT									
12/31/91	7.83	18.34	22.56	9.31	15.5	30.73	NT	NT	36.25	24.26	33.3	9.42	8.64	NT	NT	NT									
1/21/92	7.83	17.33	22.56	9.06	14.59	30.51	NT	NT	35.99	24.16	33.12	9.2	8.38	NT	NT	NT									
2/17/92	8.62	16.85	22.56	9.05	14.79	30.44	NT	NT	35.85	24.32	33.1	9.16	8.5	NT	NT	NT									
3/19/92	7	14.27	15.29	8.52	11.78	29.49	NT	NT	35.24	23.98	32.05	8.63	7.6	NT	NT	NT									
4/22/92	6.7	13.43	13.29	7.87	11.28	28.91	NT	NT	34.89	21.49	31.4	7.97	6.46	NT	NT	NT									
5/30/92	8.42	13.13	16.46	8.54	12.51	28.76	NT	NT	34.71	22.82	31.19	8.65	7.66	NT	NT	NT									
6/30/92	9.04	15.72	20.41	8.71	13.51	29.32	NT	NT	35.46	22.84	31.75	8.82	8.65	NT	NT	NT									
7/28/92	6.6	16.05	21.68	8.01	11.15	29.7	NT	NT	35.51	22.76	32.25	8.2	7.71	NT	NT	NT									
8/22/92	7.38	15.56	19.91	8.5	11.59	29.86	NT	NT	35.3	23.09	32.23	8.61	8.25	NT	NT	NT									
9/30/92	9.44	17.78	20	8.73	13.25	30.98	NT	NT	36.15	23.54	32.83	8.82	9.19	NT	NT	NT									
10/29/92	10.33	18.86	22.56	8.80	14.36	31.03	NT	NT	36.66	23.78	33.12	8.90	10.00	NT	NT	NT									
11/25/92	9.65	17.97	22.56	8.67	13.26	30.84	NT	NT	36.35	23.96	33.23	8.80	8.27	NT	NT	NT									
12/10/92	9.38	17.75	22.56	8.93	13.67	30.74	NT	NT	36.23	23.83	33.12	8.99	8.56	NT	NT	NT									
1/30/93	9.26	17.69	22.56	8.95	13.75	30.63	NT	NT	36.17	23.79	33.01	9.01	8.61	NT	NT	NT									
2/22/93	11.04	16.70	22.56	9.12	15.35	31.28	NT	NT	35.90	23.97	33.16	9.26	8.37	NT	NT	NT									
3/4/93	11.14	16.74	22.56	8.76	15.58	31.36	6.70	10.80	36.04	23.96	33.20	8.90	7.54	NT	NT	NT									
4/27/93	8.80	9.58	11.78	8.50	11.40	30.24	5.34	8.60	34.24	20.40	31.20	8.64	6.74	NT	NT	NT									
5/27/93	8.27	10.10	11.28	8.14	11.84	29.80	4.90	9.00	33.90	17.24	30.10	8.26	6.20	NT	NT	NT									
6/30/93	8.22	10.64	12.34	7.94	12.40	29.57	4.90	9.10	33.70	16.80	29.90	8.04	6.60	NT	NT	NT									
7/27/93	7.94	9.24	10.84	8.54	12.26	29.38	5.04	8.20	33.20	15.86	28.78	8.60	6.50	NT	NT	NT									
9/3/93	8.02	9.46	11.40	8.68	12.80	29.60	4.90	7.90	33.10	13.84	28.80	8.80	6.84	NT	NT	NT									
9/21/93	8.75	11.60	14.43	8.02	12.72	29.84	5.20	8.20	33.14	18.38	30.30	8.92	7.72	NT	NT	NT									
10/25/93	9.14	11.85	15.04	9.05	14.35	30.30	5.95	9.35	33.30	17.55	30.50	9.16	8.05	NT	NT	NT									
11/22/93	10.20	12.72	16.34	9.26	15.36	30.90	7.20	10.56	34.14	19.80	31.00	9.36	8.12	NT	NT	NT									
12/14/93	10.9	13.30	17.54	9.34	15.96	31.04	7.48	11.16	34.42	20.34	31.24	9.48	8.22	NT	NT	NT									
1/31/94	11.96	14.18	19.18	9.55	16.98	32.00	8.90	12.54	35.22	21.56	32.00	9.6	8.53	NT	NT	NT									
2/28/94	12.43	12.37	17.05	9.43	NT	32.30	8.34	12.05	35.27	18.33	31.96	9.53	7.84	NT	NT	NT									
3/16/94	11.8	11.04	15.54	9.30	17.78	32.12	7.56	11.48	34.60	14.90	31.36	9.40	7.45	NT	NT	NT									
4/30/94	11.80	12.70	17.04	9.30	17.92	33.95	7.65	11.88	35.20	18.17	31.06	9.42	8.48	NT	NT	NT									
5/17/94	11.5	12.24	16.76	9.36	18.86	35.06	7.5	11.86	35	16.96	31.32	9.5	NT	NT	NT	NT									
7/31/94	NT	14.6	20.68	9.11	18.89	34.2	6.89	12.2	35.72	21.8	32.41	9.21	7.52	NT	NT	NT									
8/23/94	11.8	13.25	21.2	9.24	18.64	33.98	7.86	11.6	35.6	22.2	32.62	9.4	7.6	NT	NT	NT									
9/16/94	11.74	12.88	20.5	9.2	18.56	33.95	7.52	11.48	35.5	22.4	32.74	9.34	7.6	NT	NT	NT									
10/21/94	11.8	13.5	21.66	9.5	18.7	34	7.24	11.3	36.56	22.62	32.96	9.64	7.6	NT	NT	NT									
11/21/94	12.75	14.58	22	9.88	19.5	34.52	7.4	12.2	36.68	22.88	33	9.98	7.8	NT	NT	NT									
12/22/94	12.9	12.55	NT	9.7	19.7	34.5	7.5	12.5	35.8	23.3	33.35	9.84	7.6	NT	NT	NT									
1/10/95	12.58	12.44	22	9.55	19.3	34.4	8.28	12.2	35.4	22.86	33.1	9.75	7.68	NT	NT	NT									
2/6/95	13.88	13.88	22	9.49	20.4	34.8	8.46	12.73	35.42	23	33.28	9.6	7.8	NT	NT	NT									
3/9/95	14.8	13.08	NT	9.6	21.3	35.18	9.1	13.17	35.65	23.1	33.3	9.72	7.8	NT	NT	NT									
4/14/95	13.8	6.58	14.2	9	19.95	34.65	6.3	10.9	34.55	15.7	32.98	9.15	6.9	NT	NT	NT									
5/2/95	13.2	6.4	12.1	9.03	18.5	34.4	6.21	10.35	33.75	14.9	32	9.19	6.6	NT	NT	NT									
6/2/95	12.95	11.6	14	9.2	18	34.28	7.6	11.75	34.99	18.25	31.2	9.3	7.3	NT	NT	NT									
8/23/95	13.2	15.6	20.3	9.2	19.77	34.6	7.85	11.95	35.6	21.6	32.65	9.35	7.8	NT	NT	NT									
9/12/95	13.87	16.62	20.9	9.67	20.84	35	8.91	12.85	36.15	21.9	32.92	9.54	7.88	NT	NT	NT									
10/31/95	14.85	17.8	Dry	9.5	23.5	35.8	8.9	13.4	36.75	23	33.6	9.6	8.05	NT	NT	NT									
11/20/95	15.02	17.97	Dry	9.66	23.4	35.98	9.15	13.1	36.75	23.2	33.6	9.8	7.75	NT	NT	NT									
12/7/95	15.35	18.1	Dry	9.7	23.4	36.6	9.17	13.35	36.92	23.45	33.65	9.87	7.7	NT	NT	NT									
1/3/96	16.4	18.2	Dry	9.78	NT	36.4	9.85	13.9	36.95	23.4	33.7	9.9	7.9	NT	NT	NT									
2/24/96	Plugged	15.3	Dry	9.4	Plugged	Plugged	8	13	36.3	23.45	33.8	9.55	7.6	NT	NT	NT									
3/22/96	Plugged	15.35	Dry	9.45	Plugged	Plugged	9.3	13.6	36.37	23.18	33.95	9.6	7.7	NT	NT	NT									
4/1/96	Plugged	NT	Dry	NT	Plugged	Plugged	NT	NT	NT	NT	NT	NT	12.9	18.2	11.4										
6/20/96	Plugged	8.2	Dry	8.7	Plugged	Plugged	5.65	10.8	35.2	14.4	32.23	8.85	7.25	12.2	16.96	8.55									
9/12/96	Plugged	14.02	Dry	9.05	Plugged	Plugged	7.4	11.9	35.78	21.95	33.1	9.15	7.72	12.95	16.6	7.9									
10/24/96	Plugged	15.4	22.1	9.05	Plugged	Plugged	7.8	12.2	35.78	21.4	33.4	9.2	7.8	12.85	16.48	8.3									
11/18/96	Plugged	7.5	21.82	8.65	Plugged	Plugged	6.75	11.7	3																

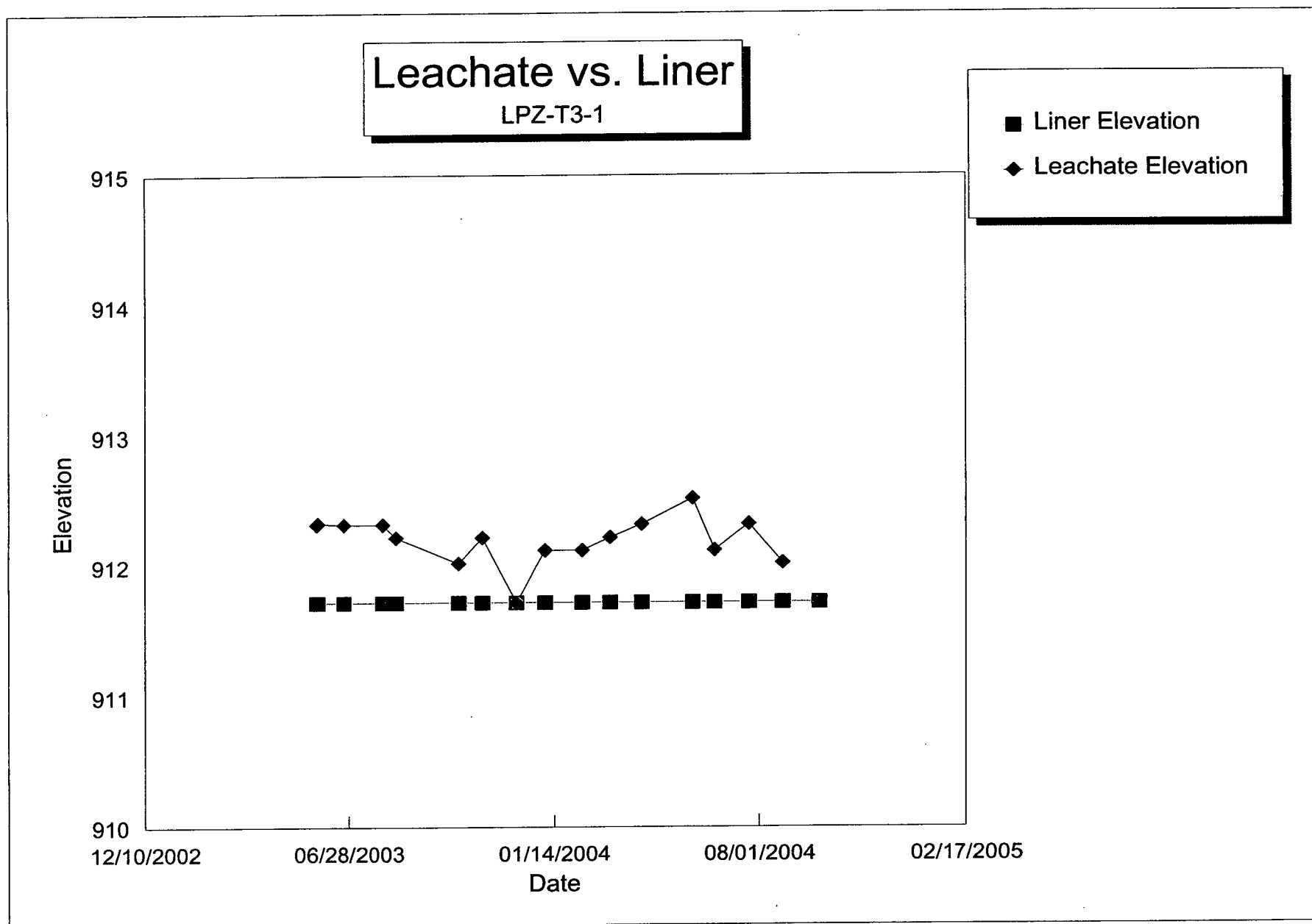
ATTACHMENT H
Leachate Elevation & Thickness Assessment Data

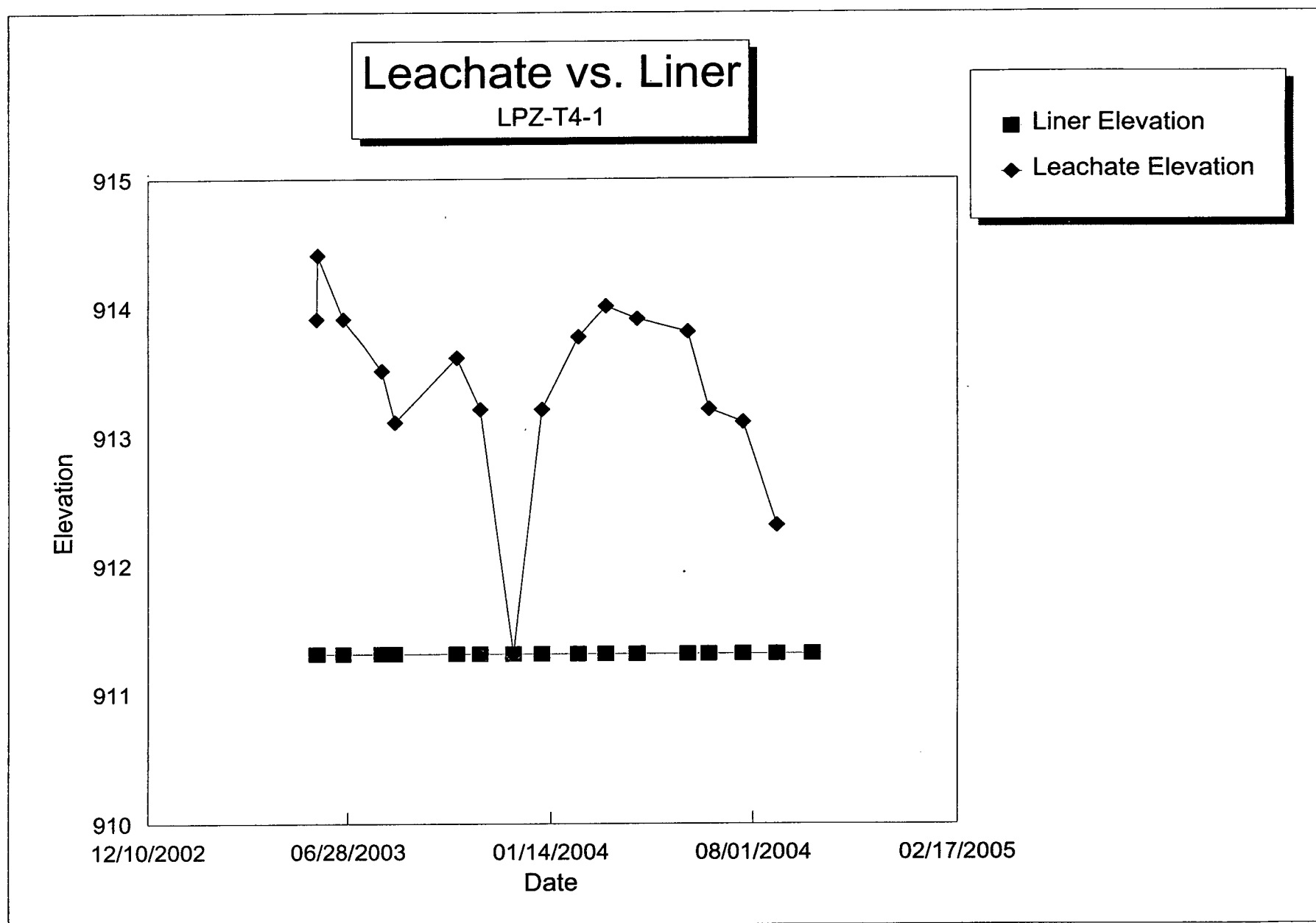
[illegible]











ATTACHMENT I
City of Ames Leachate Testing Results



RECEIVED JUN 07 2004

Water and Pollution Control Department

300 East Fifth Street, Building 1
Ames, IA 50010

Phone 515-239-5150 ♦ Fax 515-239-5251

TO: Bill Fedeler, Ames-Story Environmental Landfill - Site 2

FROM: Karla Tebben/Winnie Gleason, Pretreatment Coordinators *Winnie Gleason*

DATE: June 3, 1004

SUBJECT: Pretreatment Reporting: Spring 2004 (Permit No. 7093-5)

Listed below are analytical results of the wastewater sampled at your facility's Site 2 on May 3, 2004. The laboratory did not collect a sample at Site 1 because there was no flow through the manhole. All tested parameters for Site 2 are within permit limits. However, the COD and TKN results exceed surcharge limits. Surcharge calculations and billings will be addressed separately. Please note that the volatile organics detection levels are elevated due to dilution. The sample required dilution due to foaming of the sample during purging. Thank you for your cooperation with the pretreatment program.

Parameter	Permit Limits/ Surcharge (mg/L)	Recommended Maximum Discharge Concentrations (mg/L)	40CFR Part 445 Maximum Daily Limit (mg/L)	40CFR Part 445 Monthly Average Limit (mg/L)	Results (mg/L)
pH, units	6.0 - 10.0		6.0-9.0	6.0-9.0	7.18
TSS	1,500/300		88	27	13
Ammonia-N	200/40		10	4.9	35
TKN	/40	250			42
COD	2,500/250		140	37	460
BTEX	0.75				< 0.25
Tetrachloroethene					< 0.25
p-Cresol			0.025	0.014	< 0.005
alpha-Terpineol			0.033	0.016	< 0.005
Benzoic Acid			0.12	0.071	< 0.02

Complete the bottom portion of this page and return one copy to us by June 16, 2004. By doing so, the reporting requirements for this period will be fulfilled.

PROCESS CHANGES SINCE November 13, 2003: _____

COMPLIANCE STATEMENT: Based on my inquiry of the person(s) directly responsible for managing compliance with the pretreatment program, I certify that, to the best of my knowledge, there has been no unreported discharge in violation of the pretreatment program since November 13, 2003.

NAME _____ DATE _____

c: Todd Whipple, Fox Engineering
Jim McElvogue



Water and Pollution Control Department

300 East Fifth Street, Building 1
Ames, IA 50010

Phone 515-239-5150 ♦ Fax 515-239-5251

October 13, 2004

Mr. Bill Fedeler
Ames-Story Environmental Landfill
P.O. Box 2483
Ames, IA 50010

Re: Pretreatment Sampling Expenses

Dear Mr. Fedeler:

During the period January 1, 2004 through June 30, 2004, the City performed pretreatment sampling at the Ames-Story Environmental Landfill. The cost associated with the sampling is \$365.03.

This amount will be billed to you from the City Finance Department. A detailed summary of the costs is enclosed.

Please give me a call at 515-239-5150 if you have any questions concerning this matter.

Yours very truly,

Winifred G. Gleason, P.E.
Pretreatment Program Co-Coordinator
Water and Pollution Control Department

/bas

Enclosure

pc: Linda Stole
Todd Whipple
Jim McElvogue



Water and Pollution Control Department

300 East Fifth Street, Building 1

Ames, IA 50010

Phone 515-239-5150 ♦ Fax 515-239-5251

TO: Bill Fedeler, Ames-Story Environmental Landfill - Site 2
 FROM: Karla Tebben/Winnie Gleason, Pretreatment Coordinators
 DATE: November 29, 1004
 SUBJECT: Pretreatment Reporting: Fall 2004 (Permit No. 7093-5)

Listed below are analytical results of the wastewater sampled at your facility's Site 2 on September 20, 2004. The laboratory did not collect a sample at Site 1 because there was no flow through the manhole. All tested parameters for Site 2 are within permit limits. Thank you for your cooperation with the pretreatment program.

Parameter	Permit Limits/ Surcharge (mg/L)	Recommended Maximum Discharge Concentrations (mg/L)	40CFR Part 445 Maximum Daily Limit (mg/L)	40CFR Part 445 Monthly Average Limit (mg/L)	Results (mg/L)
pH, units	6.0 - 10.0		6.0-9.0	6.0-9.0	6.86
TSS	1,500/300		88	27	6.2
Ammonia-N	200/40		10	4.9	39
COD	2,500/250		140	37	450
TPH (gasoline)	10.0				< 0.100
BTEX	0.75				< 0.011

Complete the bottom portion of this page and return one copy to us by December 20, 2004. By doing so, the reporting requirements for this period will be fulfilled.

PROCESS CHANGES SINCE June 15, 2004: _____

COMPLIANCE STATEMENT: Based on my inquiry of the person(s) directly responsible for managing compliance with the pretreatment program, I certify that, to the best of my knowledge, there has been no unreported discharge in violation of the pretreatment program since June 15, 2004.

NAME _____ DATE _____

c: Todd Whipple, Fox Engineering
 Jim McElvogue

Pretreatment Sampling

7-Sep-04

Environmental Landfill South

Travel Time (min): 26

Trip (miles): 6

Date	Personnel		Maintenance Prep		Laboratory Prep		Site Time (min)	Cost*	Sampling			Analysis		Total Charges
	Employee	Rate	Time (min)	Cost	Time (min)	Cost			Equipment	# used	Cost	Lab No.	Lab Charge	
5/3/2004	TC	\$28.07		\$0.00	15	\$7.02	23	\$22.92	Truck/Van	1	\$3.30	40968	\$82.00	\$115.24
	EA	\$19.94	7	\$2.33		\$0.00	23	\$16.28	Sampler/Ice		\$0.00	UHL	\$200.00	\$218.61
				\$0.00		\$0.00		\$0.00	S&H (UHL)		\$0.00			\$0.00
Subtotal				\$2.33		\$7.02		\$39.21			\$3.30		\$282.00	\$333.85
Notes:														
				\$0.00		\$0.00		\$0.00	Van		\$0.00			\$0.00
				\$0.00		\$0.00		\$0.00	Sampler/Ice		\$0.00			\$0.00
				\$0.00		\$0.00		\$0.00	S&H (UHL)		\$0.00			\$0.00
Subtotal				\$0.00		\$0.00		\$0.00			\$0.00		\$0.00	\$0.00
Notes:														
				\$0.00		\$0.00		\$0.00	Van		\$0.00			\$0.00
				\$0.00		\$0.00		\$0.00	Sampler/Ice		\$0.00			\$0.00
				\$0.00		\$0.00		\$0.00	S&H (UHL)		\$0.00			\$0.00
Subtotal				\$0.00		\$0.00		\$0.00			\$0.00		\$0.00	\$0.00
Notes:														
				\$0.00		\$0.00		\$0.00	Van		\$0.00			\$0.00
				\$0.00		\$0.00		\$0.00	Sampler/Ice		\$0.00			\$0.00
				\$0.00		\$0.00		\$0.00	S&H (UHL)		\$0.00			\$0.00
Subtotal				\$0.00		\$0.00		\$0.00			\$0.00		\$0.00	\$0.00
Notes:														
				\$0.00		\$0.00		\$0.00	Van		\$0.00			\$0.00
				\$0.00		\$0.00		\$0.00	Sampler/Ice		\$0.00			\$0.00
				\$0.00		\$0.00		\$0.00	S&H (UHL)		\$0.00			\$0.00
Subtotal				\$0.00		\$0.00		\$0.00			\$0.00		\$0.00	\$0.00
Notes:														
				\$0.00		\$0.00		\$0.00	Van		\$0.00			\$0.00
				\$0.00		\$0.00		\$0.00	Sampler/Ice		\$0.00			\$0.00
				\$0.00		\$0.00		\$0.00	S&H (UHL)		\$0.00			\$0.00
Subtotal				\$0.00		\$0.00		\$0.00			\$0.00		\$0.00	\$0.00
Notes:														
				\$0.00		\$0.00		\$0.00	Van		\$0.00			\$0.00
				\$0.00		\$0.00		\$0.00	Sampler/Ice		\$0.00			\$0.00
				\$0.00		\$0.00		\$0.00	S&H (UHL)		\$0.00			\$0.00
Subtotal				\$0.00		\$0.00		\$0.00			\$0.00		\$0.00	\$0.00
Notes:														
Total				\$2.33		\$7.02		\$39.21			\$3.30		\$282.00	\$333.85

*Cost includes: sampling time + travel time to site

ATTACHMENT J
Explosive Gas Monitoring Results

AMES-STORY ENVIRONMENTAL LANDFILL
85-SDP-13-91P
EXPLOSIVE GAS MONITORING RESULTS

SAMPLING DATE: December 8, 2003

Reference* Location	Combustible	%Oxygen	CO ppm	H2S ppm
MW28/MW29	0	20.6 to 20.8	0	0
MW36/MW37	0	20.6 to 20.8	0	0
MW35	0	20.6 to 20.8	0	0
MW33/MW25	0	20.6 to 20.8	0	0
MW32/MW24	0	20.6 to 20.8	0	0
MW30/MW23	0	20.6 to 20.8	0	0
MW34	0	20.6 to 20.8	0	0
MW31	0	20.6 to 20.8	0	0
Trailer	0	20.6 to 20.8	0	0
MW6/MW7/MW8	0	20.6 to 20.8	0	0
MW38/39	0	20.6 to 20.8	0	0
MW40/MW41	0	20.6 to 20.8	0	0
MW42/MW43	0	20.6 to 20.8	0	0

AMES-STORY ENVIRONMENTAL LANDFILL
85-SDP-13-91P
EXPLOSIVE GAS MONITORING RESULTS

SAMPLING DATE: March 14, 2004

Reference* Location	Combustible	%Oxygen	CO ppm	H2S ppm
MW28/MW29	0	20.8	0	0
MW36/MW37	0	20.8	0	0
MW35	0	20.8	0	0
MW33/MW25	0	20.8	0	0
MW32/MW24	0	20.8	0	0
MW30/MW23	0	20.8	0	0
MW34	0	20.8	0	0
MW31	0	20.8	0	0
Trailer	0	20.8	0	0
MW6/MW7/MW8	0	20.8	0	0
MW38/39	0	20.8	0	0
MW40/MW41	0	20.8	0	0
MW42/MW43	0	20.8	0	0

AMES-STORY ENVIRONMENTAL LANDFILL
85-SDP-13-91P
EXPLOSIVE GAS MONITORING RESULTS

SAMPLING DATE: June 18, 2004

Reference* Location	Combustible	%Oxygen	CO ppm	H2S ppm
MW28/MW29	0	20.6	0	0
MW36/MW37	0	20.6	0	0
MW35	0	20.6	0	0
MW33/MW25	0	20.6	0	0
MW32/MW24	0	20.6	0	0
MW30/MW23	0	20.6	0	0
MW34	0	20.6	0	0
MW31	0	20.6	0	0
Trailer	0	20.6	0	0
MW6/MW7/MW8	0	20.6	0	0
MW38/39	0	20.6	0	0
MW40/MW41	0	20.6	0	0
MW42/MW43	0	20.6	0	0

AMES-STORY ENVIRONMENTAL LANDFILL
85-SDP-13-91P
EXPLOSIVE GAS MONITORING RESULTS

SAMPLING DATE: September 28, 2004

Reference* Location	Combustible	%Oxygen	CO ppm	H2S ppm
MW28/MW29	0	20.8	0	0
MW36/MW37	0	20.8	0	0
MW35	0	20.8	0	0
MW33/MW25	0	20.8	0	0
MW32/MW24	0	20.8	0	0
MW30/MW23	0	20.8	0	0
MW34	0	20.8	0	0
MW31	0	20.8	0	0
Trailer	0	20.8	0	0
MW6/MW7/MW8	0	20.8	0	0
MW38/39	0	20.8	0	0
MW40/MW41	0	20.8	0	0
MW42/MW43	0	20.8	0	0